

advice

ICT, amenability and the BBC digital
curriculum service in England

Supplement 2



British Educational Communications
and Technology Agency

This is supplement no.2 to Becta's report to the DCMS: *ICT, amenability and the BBC digital curriculum service in England*. This supplement contains findings on the amenability in those subjects to be resourced and launched by the BBC as part of its digital curriculum service in 2007. Findings on amenability of subjects to be launched by the BBC in 2006 can be found in the annex to Becta's report to the DCMS, and in supplement no.1 of the report.

Becta would like to thank the Qualifications and Curriculum Authority (QCA) for its assistance in the assessment of amenability in these subjects.

Findings on the following subjects are contained within this supplement:

Key Stage 2

Art and Design
Mathematics
MFL
Thinking skills

Key Stage 3

Citizenship
English
History
Mathematics
Music
Religious Education
Science
Work-related education

Key Stage 4

Design and Technology
Mathematics
Physical Education
Religious Education
Science

GCSE

Child Development (*Home economics*)
Drama
French
Geography
Leisure and tourism
Media Studies

1a) Art and Design at Key Stage 2

The learning requirements for Art and Design at Key Stage 2 are set out in the following sections of the National Curriculum programme of study:

- Exploring and developing ideas
- Investigating and making art, craft and design
- Evaluating and developing work
- Knowledge and understanding.

The breadth of study section outlines the context, activities, areas of study and range of experiences through which the above knowledge, skills and understanding should be taught.

It would not be appropriate to introduce the teaching and learning of every aspect of art and design through the medium of ICT, since it is recognised that pupils' experience of, for example, visual and tactile qualities should not be developed solely through ICT means. However, it is the case that ICT-based resources might be used to consolidate, extend and apply learning and further develop ideas:

Students should be taught about the visual and tactile elements, including colour, pattern and texture, line and tone, shape, form and space, and how these elements can be combined and organised for different purposes.

Art and design, Key Stage 2, 4a

This requirement could well be supported by ICT resources, for example by providing online access to examples of artists' work.

The requirements have been examined for amenability. Together, the requirements describe a set of inter-related holistic skills of the type described in section 4.3.4. Since pupils develop these skills in the context of each other – for example, adapt and refine their work and plan and develop this further, in the light of their own and others' evaluations – 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%

Becta will consult with QCA in assessing the BBC's coverage proposals for Key Stage 2 Art and Design since much of the information required to establish the 50 per cent measures is contained in custom and practice and national expectation.

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 2 Art and Design, Becta judges that there are no outcomes that are not amenable to ICT in the programme of study for England at Key Stage 2.

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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk>].

1b) Mathematics at Key Stage 2

Ma2 1, Ma3 1 and Ma4 1 on 'using and applying' in mathematics Key Stage 2 list sets of holistic or integrated skills. These lists, which describe mathematical problem-solving and process skills, are judged to be of the type described in section 4.3.4, for which good pedagogy requires that they should be taught and learnt in an integrated way. These then are considered to be amenable for the purposes of this exercise but, as detailed in section 4.5, will not be included when determining the question of 50 per cent coverage.

The remaining requirements, which define the content of mathematics, 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. At Key Stage 1, learners are introduced to abstract mathematical concepts through hands-on work and exploration such as sorting real objects into sets, learning to say one number for each object, handling real shapes and so on. At Key Stage 2, concepts introduced at Key Stage 1 are further developed, and new mathematical concepts introduced.

It would not be fitting or appropriate to introduce the teaching and learning of many mathematical concepts through an ICT medium. However, it is feasible that an ICT-based resource might be used to consolidate, refine and apply understanding of previously learnt concepts.

Measuring 50%

The BBC may select up to 50 per cent of those outcomes judged to be amenable by Becta. For the purposes of determining 50 per cent, the 'using and applying' sections of Ma2 1, Ma3 1 and Ma4 1 in mathematics are not included in the calculation, as this would constitute double counting.

Amenability statement

There are no outcomes judged by Becta to be not amenable to being taught by ICT at Key Stage 2.

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

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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk/>]

1c) MFL at Key Stage 2

There are no statutory guidelines for MFL at Key Stage 2. There are, however, non-statutory guidelines for Years 5 and 6. These have been assessed in terms of their amenability to ICT.

There are very few statements in the National Curriculum guidelines at Key Stage 2 that can be covered discretely. The nature of language learning is such that there is constant interplay between different skills. While it is possible to focus on one aspect of language learning at a particular time, other skills inevitably come into play; otherwise the language learning experience would be unnaturally distorted. Together, the guidelines describe a set of inter-related holistic knowledge and skills of the type described in section 4.3.4.

Measuring 50%

The BBC may develop resources for the equivalent of up to half of the QCA scheme of work units in the key stage. It should be noted that this measure refers to the 'size' and scope of units, and not to their content.

Amenability statement

Becta finds that there are no outcomes judged to be not amenable to being taught by ICT in the non-statutory guidelines at Key Stage 2.

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

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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk/>].

1d) Thinking skills, 5–11

'Thinking skills' are often taught through subject content (for example, the Cognitive Acceleration in Science Education programme). There is of course, much debate about theories and approaches, for example whether 'thinking skills' actually do exist and whether skills can be transferred from context to context. The National Curriculum supports the view that thinking skills do exist:

By using thinking skills pupils can focus on 'knowing how' as well as 'knowing what' – learning how to learn.

The curriculum sets out the following skills:

- Information-processing skills
- Reasoning skills
- Enquiry skills
- Creative thinking skills
- Evaluation skills.

As the presentation of thinking skills in the National Curriculum makes clear, 'thinking skills' are not generally seen as a 'subject'. While different programmes may use alternative terminology (and may describe other thinking skills), what can be said about the skills is that they are closely inter-related.

The use of computers has long been associated with thinking skills, although there are differing views on how computers can be used most effectively in their development. However, what does seem to be clear is that ICT has a role in thinking skills, whether as a tool, as a stimulus or as a source of information.

Measuring 50%

Given that thinking skills is not a subject in its own right, for the reasons given in section 4.5 of Becta's report, it is not appropriate to include these skills in determining the 50 per cent.

However, in its approach to thinking skills it is important that any additional subject content that the BBC might provide to support the development of thinking skills does not, in sum with any subject content already planned or provided in that subject and key stage, breach the limit of 50 per cent in total.

Amenability statement

Given the nature of thinking skills, it is appropriate to consider them as amenable to ICT for the reasons given in section 4.3.4 of Becta's report to the DCMS.

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

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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk/>].

2a) Citizenship, Key Stage 3

The programme of study for Citizenship at Key Stage 3 is set out in the following sections: *knowledge and understanding about becoming informed citizens* and *developing skills of enquiry and communication* and *developing skills of participation and responsible action*. The programme states that the knowledge and understanding is acquired and applied in the development of the skills outlined in sections 2 and 3. Good pedagogy requires that these skills should be taught in an integrated way, and for reasons already given in section **4.3.4** these are considered to be amenable for the purposes of the exercise but, as detailed in section **4.5**, will not be included in the question of 50 per cent coverage.

The requirements of knowledge and understanding could be supported through ICT, for example through online research and simulation activities; it is also worth noting the potential of ICT to facilitate social communications in the context of Citizenship education.

Measuring 50%

The BBC may select up to half the requirements (outcomes) from the knowledge and understanding section of the programme of study at Key Stage 3.

Amenability statement

There are no outcomes judged by Becta to be not amenable in the Citizenship Key Stage 3 programme of study.

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

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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk/>].

2b) English at Key Stage 3

The learning requirements for English at Key Stage 3 are divided into three broad themes: speaking and listening, reading, and writing. The requirements have been examined for amenability.

In En1, some of the requirements in the sections might be considered non-amenable if taken in isolation and out of context. While it would be difficult to argue that all the requirements under these headings could be taught via ICT, it is clear that ICT might be used to support and extend the learning. Further, these requirements address key aspects of the subject, and describe holistic or integrated skills that are part of effective learning in the subject. 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 should 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 experience of reading them on screen, and be able to write on paper as well as on computer. 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 BBC may select up to 50 per cent of those outcomes judged to be amenable by Becta.

Amenability statement

The following outcomes are judged by Becta to be **not** amenable in English at Key Stage 3:

En1 3a-e

En3 5a, 5b

With reference to En2 1f – this statement is amenable in the context of shorter texts but should not be regarded as an endorsement of learners reading lengthy whole texts on-screen.

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

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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk/>].

2c) History at Key Stage 3

The programme of study for history at Key Stage 3 is divided into five broad themes:

- Chronological understanding
- Knowledge and understanding of events, people and changes in the past
- Historical interpretation
- Historical enquiry
- Organisation and communication.

Together, the requirements under these headings describe a set of inter-related holistic knowledge and skills of the type described in section **4.3.4** of the report, *ICT, amenability and the BBC digital curriculum service in England*. Since pupils develop these in the context of each other, for example, chronological understanding in the context of historical enquiry, 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%

Since the requirements of the programme of study for history at Key Stage 3 form a holistic knowledge/skill set, the BBC may develop resources for the equivalent of up to half the QCA Scheme of Work units in the key stage. It should be noted that this measure refers to the 'size' and scope of units, and not to their content.

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 history, Becta finds that there are no outcomes judged to be 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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk/>].

2d) **Mathematics at Key Stage 3**

The 'using and applying' sections in Ma2, Ma3 and Ma4 in Key Stage 3 mathematics list sets of holistic or integrated skills. These lists, which describe mathematical problem-solving and process skills, are judged to be of the type described in section **4.3.4**, for which good pedagogy requires that they should be taught and learnt in an integrated way. These then are considered to be amenable for the purposes of this exercise but, as detailed in section **4.5**, will not be included when determining the question of 50 per cent coverage.

The remaining requirements, which define the content of mathematics, have been examined for amenability. At earlier key stages, appropriate learning and teaching requires first-hand physical exploration and experience of the real world as described in section **4.3.3**, particularly as many fundamental concepts are introduced at this stage. At Key Stage 3, however, the development of concepts and increased level of abstraction, for example, open further avenues for the use of ICT, as attested by the existence of a variety of sophisticated dynamic geometrical, graphical and symbolic algebra programs relevant to many topics in this key stage.

Measuring 50%

The BBC may select up to 50 per cent of those outcomes judged to be amenable by Becta. For the purposes of determining 50 per cent, the 'using and applying' sections of Ma2, Ma3 and Ma4 in mathematics are not included in the calculation, as this would constitute double counting.

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 by Becta to be not amenable to being taught by ICT in the Key Stage 3 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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk/>].

2e) Music at Key Stage 3

The learning requirements for music at Key Stage 3 are divided into four broad themes:

- Controlling sounds through singing and playing
- Creating and developing musical ideas
- Responding and reviewing
- Listening, and applying knowledge and understanding.

Together, the requirements under these headings describe a set of inter-related holistic skills of the type described in section 4.3.4, though it should be noted that the requirement for listening and applying knowledge and understanding underpins all other requirements. Since pupils develop these skills in the context of each other – for example, listening skills in the context of composing and performing – 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.

One requirement in particular, taken in isolation, would appear not to be amenable. This is requirement 1a, 'Pupils should be taught how to sing unison and part songs developing vocal techniques and musical expression'. However, ICT-based resources might reasonably be developed that will support the teaching and learning of singing, for example by stimulating interest, modelling possibilities and offering opportunities for reflection and analysis. We understand that the BBC is currently planning resources of this kind.

Measuring 50%

Since the requirements of the programme of study for music at Key Stage 3 form a set of holistic skills, the BBC may develop resources for the equivalent of up to half of the QCA scheme of work units in the key stage. It should be noted that this measure refers to the 'size' and scope of units, and not to their content. The intention of the scheme of work is that the units should be repeated, so the maximum 'size' should be broadly equivalent to seven units.

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 music, Becta judges that there are no outcomes that are not amenable to ICT 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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk/>].

2f) Religious education (RE) at Key Stage 3

Becta refers throughout to the QCA published non-statutory framework for RE in England (October 2004).

The framework requires pupils to (amongst other things) investigate, analyse, interpret, explain and reflect on the forms and articles of religious belief and the impact of religions in personal life and the wider world. The learning outcomes are closely inter-related. For example, '[investigating] and [explaining] why people belong to faith communities, and [explaining] the reasons for diversity in religion' (1c) is likely to involve '[evaluating] the challenges and tensions of belonging to a religion and the impact of religion in the contemporary world, expressing their own ideas' (2b).

Together, the requirements of the framework describe a set of inter-related holistic skills of the type described in section 4.3.4. Since pupils develop these skills in the context of each other, 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%

Becta will consult with QCA in assessing the 50 per cent coverage condition.

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 religious education, Becta judges that there are no outcomes in the proposed non-statutory framework for RE (September 2004) for England at Key Stage 3 that are not amenable to ICT.

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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk>].

2g) Science at Key Stage 3

Sc1 in science 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, for which good pedagogy requires that they should be taught and learnt in an integrated way. These then are considered to be amenable for the purposes of this exercise but, as detailed in section 4.5, 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 practical experimental work; however, ICT can also support and extend practical work, for example through the use of simulations, as well as for use in consolidating, developing and applying understanding of scientific concepts.

Measuring 50%

The BBC may select up to 50 per cent of those outcomes judged to be amenable by Becta. For the purposes of determining 50 per cent, Sc1 science is not included in the calculation, as this would constitute double counting.

Amenability statement

There are no outcomes judged to be not amenable in the programme of study for science 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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk/>].

2h) Work-related education, 11–14

In England, the *Framework for Career Education and Guidance, 11-19* (DfES) is the most relevant document with regard to work-related education in the 11–14 age group. The learning outcomes of the framework have been assessed for amenability to being taught by ICT.

The framework covers the themes of self-development, career exploration and career management. There are many ways in which ICT can support the teaching and learning of the requirements of the framework, for example, as a source of information or as a tool for exploration. For these reasons it is sensible to judge the outcomes as amenable to ICT.

Measuring 50%

Becta will look to QCA for advice when assessing the BBC's commissioning plans with regard to the 50 per cent measures.

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 the *Framework for Career Education and Guidance, 11-19*, Becta judges that there are no outcomes that are not amenable to ICT.

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 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.

3a) Design and Technology at Key Stage 4

The learning requirements for design and technology at Key Stage 4 can be considered in two broad groups:

- Developing, planning and communicating ideas (1a-h)
- Working with tools, equipment, materials and components to produce quality products (2a-e)
- Evaluating processes and products (3a-c)

and knowledge and understanding of

- materials and components (4a-d)
- systems and control (5a-g)
- structures (6a-c).

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. 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 per cent of the outcomes in the three 'knowledge and understanding' sections, that is, sections 4, 5 and 6.

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 4 design and technology, Becta judges that there are no outcomes that are not amenable to ICT 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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk/>].

3b) Mathematics at Key Stage 4 (foundation and higher)

The 'using and applying' sections in Ma2, Ma3 and Ma4 in Key Stage 4 mathematics list sets of holistic or integrated skills. These lists, which describe mathematical problem-solving and process skills, are judged to be of the type described in section 4.3.4, for which good pedagogy requires that they should be taught and learnt in an integrated way. These then are considered to be amenable for the purposes of this exercise but, as detailed in section 4.5, will not be included when determining the question of 50 per cent coverage.

The remaining requirements, which define the content of mathematics, have been examined for amenability. At earlier key stages, appropriate learning and teaching requires first-hand physical exploration and experience of the real world as described in section 4.3.3, particularly as many fundamental concepts are introduced at this stage. At Key Stage 4, however, the development of concepts and increased level of abstraction, for example, open further avenues for the use of ICT, as attested by the existence of a variety of sophisticated dynamic geometrical, graphical and symbolic algebra programs relevant to many topics in this key stage.

Measuring 50%

The BBC may select up to 50 per cent of those outcomes judged to be amenable by Becta. For the purposes of determining 50 per cent, the 'using and applying' sections of Ma2, Ma3 and Ma4 in mathematics are not included in the calculation, as this would constitute double counting.

Amenability statement

There are no outcomes judged by Becta to be not amenable to being taught by ICT in the Key Stage 4 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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk/>].

3c) Physical Education at Key Stage 4

ICT can help to maximise the effective use of the weekly entitlement to physical education (PE), and of the range of activities undertaken during the time available. In other words, effective ICT use in the subject will support the actual doing of activities rather than detract from them. 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 learning requirements for PE are set out under four headings:

- Acquiring and developing skills
- Selecting and applying skills, tactics and compositional ideas
- Evaluating and improving performance
- Knowledge and understanding of fitness and health.

Together, the requirements under these headings describe a set of integrated or holistic knowledge and skills of the type described in section 4.3.4. Since pupils develop these skills in the context of each other, for example, being taught to 'judge how good a performance is and decide to improve it' (3b) in the context of learning how to 'use advanced strategic ... and organisational concepts and principles' (2a) – to require the BBC digital curriculum service to deal with up to 50 per cent of these, but not to deal with the others, would be to require it to produce pedagogically unsound resources.

Alongside these outcomes, the 'breadth of study' section outlines six areas of activity, each with an accompanying set of outcomes: dance activities, games activities, gymnastic activities, swimming activities, athletic activities, outdoor and adventurous activities. The set of outcomes for each of these areas of activity also forms a holistic whole. For example,

- choreograph and perform complex dances using advanced techniques

will involve learning to

- use presentational skills in their dances.

Some of the statements within the breadth of study do not lend themselves individually to being taught via ICT (for example, 'perform complex dances' above). However, there is a variety of ways in which ICT can, for example, support the overarching outcome of becoming an accomplished dancer, through demonstrating techniques, supplementing verbal feedback and developing children's observational and evaluative assessment.

Measuring 50%

Becta will consult with QCA in assessing the BBC's coverage proposals for Key Stage 4 PE since much of the information required to establish the 50 per cent 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 4 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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk/>].

3d) Religious Education (RE) at Key Stage 4

Becta refers throughout to the QCA published non-statutory framework for RE in England (October 2004).

The framework requires pupils to (amongst other things) investigate, analyse, interpret, explain and reflect on the forms and articles of religious belief and the impact of religions in personal life and the wider world. It should be noted that the learning outcomes are closely inter-related.

Together, the requirements of the framework describe a set of inter-related holistic skills of the type described in section 4.3.4. Since pupils develop these skills in the context of each other, 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%

Becta will look to QCA for advice in the assessment of the 50 per cent measures.

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 4 religious education, Becta judges that there are no outcomes in the proposed non-statutory framework for RE (September 2004) for England at Key Stage 4 that are not amenable to ICT.

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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk/>].

3e) Science at Key Stage 4

How science works 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, for which good pedagogy requires that they should be taught and learnt in an integrated way. These then are considered to be amenable for the purposes of this exercise but, as detailed in section 4.5, will not be included when determining the question of 50 per cent coverage.

The remaining requirements of the required programme of study (under 'Breadth of study'), have been examined for amenability. For many of these, appropriate learning and teaching requires practical experimental work; however, ICT can also support and extend practical work, for example through the use of simulations, as well as for use in consolidating, developing and applying understanding of scientific concepts.

Measuring 50%

The BBC may select up to 50 per cent of those outcomes judged to be amenable by Becta. For the purposes of determining 50 per cent, the *How science works* section is not included in the calculation, as this would constitute double counting.

Amenability statement

There are no outcomes judged to be not amenable in the programme of study for science at Key Stage 4.

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 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. Becta strongly recommends that, as it goes forward with its planning, the BBC take account of the advice provided on the National Curriculum in Action website [<http://www.ncaction.org.uk/>].

4a) **Child Development (Home economics) at GCSE**

The learning requirements for Child Development (home economics) at GCSE are given in the specifications set out by QCA. The requirements have been examined for amenability.

The subject content of the syllabuses covers three main areas:

- Family
- Care of the child
- Development of the child

Clearly ICT can support the development of knowledge and understanding in the subject content, for example, by supporting investigation and the development of information for the content areas.

Measuring 50%

In this subject, the GCSE specifications (syllabuses) produced by the awarding bodies must be used as the basis for the determination of the 50 per cent.

Amenability statement

Based on both the inspection of learning requirements set out in the specifications and an assessment of the role of ICT in the holistic development of skills in GCSE Child Development, Becta finds that there are no outcomes judged to be not amenable in the specifications.

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

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 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.

4b) Drama at GCSE

The learning requirements for Drama at GCSE are set out in the subject criteria developed by QCA, and approved for teaching by the regulatory authorities in England, Wales and Northern Ireland. The requirements have been examined for amenability.

There are a variety of ways in which ICT can support learning in this GCSE, including the planning and development of performance, as a means for research and stimuli, and to support learning within a range of areas available for study such as sets, costume, lighting and so on.

In terms of content, candidates may choose two options from a list for coursework, one in relation to *scripted* work and the other in relation to *unscripted* work. The written assessment of the exam includes two elements: the study of a set play from a practical perspective and/or the response to live productions seen as part of the course.

Measuring 50%

In this subject, the GCSE specifications (syllabuses) produced by the awarding bodies must be used as the basis for the determination of 50 per cent.

Amenability statement

There are no outcomes judged to be not amenable by Becta in Drama at GCSE.

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

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 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.

4c) French at GCSE

The learning requirements for French at GCSE are set out in the specifications approved for teaching by the regulatory authorities in Northern Ireland, England and Wales with reference to the GCSE subject criteria. The requirements have been examined for amenability.

Some of the requirements describe a holistic or integrated group of skills. 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), these skills are not included in the list of learning outcomes against which the 50 per cent would be measured.

The remaining requirements could, in principle, be taught via ICT (but see the note on context below).

Measuring 50%

In this subject the GCSE specifications (syllabuses) produced by the awarding bodies must be used as the basis for the determination of 50 per cent.

Amenability statement

Based on both the inspection of the learning requirements set out in the specifications and an assessment of the role of ICT in the holistic development of skills in GCSE French, Becta finds that there are no outcomes judged to be not amenable in the specifications.

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 recommendations 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 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.

4d) Geography at GCSE

The learning requirements for geography at GCSE are set out in the subject criteria developed by QCA and the specifications produced by the relevant awarding bodies in response to these criteria. The requirements have been examined for amenability.

Some of the requirements describe a holistic or integrated group of skills. 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), these skills are not included in the list of learning outcomes against which the 50 per cent would be measured.

The remaining requirements could, in principle, be taught via ICT (but see the section on context below).

Measuring 50%

In this subject, the GCSE specifications (syllabuses) produced by the awarding bodies must be used as the basis for the determination of 50 per cent.

Amenability statement

Based on both the inspection of the learning requirements set out in the specifications and an assessment of the role of ICT in the holistic development of skills in GCSE geography, Becta finds that there are no outcomes judged to be not amenable in the specifications.

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 recommendations 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 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.

4e) Leisure and tourism at GCSE

The learning requirements for leisure and tourism at GCSE are set out in the subject criteria developed by QCA and approved for teaching in England, Northern Ireland and Wales. The requirements have been examined for amenability.

The requirements for leisure and tourism include the development of knowledge, understanding and skills relating to a considerable number of contexts including, leisure activities, tourist destinations, marketing methods and market research. ICT would clearly be a very valuable support to developing knowledge and understanding in all these areas of learning. The importance of the online medium to the leisure and tourism industries further underlines the amenability to ICT of the learning requirements.

Measuring 50%

In this subject, the GCSE specifications produced by the awarding bodies must be used as the basis for the determination of 50%.

Amenability statement

Becta judges that there are no outcomes judged to be not amenable to ICT.

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.

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 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.

4f) **Media Studies at GCSE**

The learning requirements for GCSE media studies are set out in subject criteria developed by QCA and the specifications produced by the relevant awarding bodies. The requirements have been examined for amenability.

Television, radio, film, popular music, and print media (the broad definition of 'mass media' in Media Studies GCSE) can all be studied with the support of ICT. In many cases these media are present in one form or another online, for example, the online editions of newspapers. Equally, forms of digital media that are specific to the online environments may also be significant objects of study. In addition, the role of ICT for presentation is also a significant opportunity.

It is very much expected that ICT be integrated into media studies, whether for use in investigating, presenting, recording or creating. Therefore, it is sensible to judge the specifications of GCSE media studies as amenable to ICT.

Measuring 50%

In this subject, the GCSE specifications (syllabuses) produced by the awarding bodies must be used as the basis for the determinations of 50 per cent.

Amenability statement

Based on both inspection of the learning requirements set out in the specifications and an assessment of the role of ICT in the holistic development of skills and knowledge in GCSE Media Studies, Becta finds that there are no outcomes judged to be not amenable in the specifications.

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 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.

advice

experience

standard



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