advice

evidence

standard

ICT, amenability and the BBC digital curriculum service in Northern Ireland

Supplement 3

Becta
British Educational Communications
and Technology Agency

This is Supplement 3 to Becta's report to the DCMS: *ICT, amenability and the BBC digital curriculum service in Northern Ireland.* **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 2008. Findings on amenability of subjects to be launched by the BBC in 2006/7 can be found in the annex to Becta's report to the DCMS, and in Supplements 1 and 2 to the report.**

Becta would like to thank the Council for the Curriculum Examinations and Assessment (CCEA) for its assistance in the assessment of amenability in these subjects.

Findings on the following subjects are contained within this supplement:

Key Stage 1

The World Around Us (Geography)
Religious Education

Key Stage 2

The World Around Us (Technology)

Key Stage 3

Art and design
Physical education
PSHE (also covers Key Stage 4)
Thinking skills (also covers Key Stage 4)

Key Stage 4

Local and Global Citizenship

GCSE

Applied ICT
Art and design
Engineering
Health and social care
History
Hospitality and catering
Music

1a) The World Around Us (Geography sections) at Key Stage 1

The World Around Us is organised into three strands:

- Me and My home
- Me and My school
- My Environment.

Each of these strands contains a number of statutory requirements. These requirements span across and connect subjects that are contributory to The World Around Us: geography, history, science and technology.

The statutory requirements cover a number of areas that are interconnected. For example, 'to explore and investigate aspects of their [learners'] own immediate world', is unlikely to be done without learning 'to compare and contrast their [learners'] lives and homes, now and then and with those of children elsewhere'.

The outcomes of each strand connect learning across the subject areas. As a consequence, it must be noted that the requirements cannot be covered entirely separately. Indeed they form a holistic or integrated group of requirements as described in section **4.3.4** of *ICT, amenability, and the BBC digital curriculum service in Northern Ireland*; and for the reasons set out in section **4.5**, these skills are not included in the list of learning outcomes against which the 50 per cent would be measured.

It should also be noted that in addition to the statutory requirements (which are set out in bold), the curriculum also provides for each subject area in the strand, including geography, a number of non-statutory suggested items for learning which teachers may select from.

Measuring 50 per cent

Becta will look to CCEA for detailed advice in making the assessment of the BBC's coverage plan.

Amenability statement

There are no outcomes judged to be not amenable in the programme of study for The World Around Us (geography) at Key Stage 1.

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 the BBC take account of the advice provided in the revised Northern Ireland Curriculum 4–14, available on the CCEA website [**http://www.ccea.org.uk/**].

1b) Religious Education at Key Stage 1

We refer throughout this note to the document *Proposals for a revised core syllabus in RE in grant-aided schools in Northern Ireland* (September 2003). We recognise that this proposed syllabus is subject to consultation and therefore to change. As a consequence, these notes may also be subject to revision. It should also be noted that the proposed syllabus relates to grant-aided schools only. The proposed syllabus has developed via a steering group and working group established by the four main Christian Church leaders in Northern Ireland.

The syllabus sets out the content pupils should be given the opportunity to study and explore. The 'pupils should be able to' statements are the learning outcomes. We note that the learning outcomes are themselves non statutory and 'illustrative material for the guidance of teachers'; however, as they exemplify 'specimen' outcomes in relation to the subject content studied by pupils, for the purposes of this exercise Becta will regard these outcomes as representative.

At Key Stage 1 the syllabus is organised in three parts:

• The Revelation of God
• The Christian Church
• Morality.

The learning outcomes for these sections have been assessed for amenability to ICT.

In general, the learning outcomes, though varied, are of a range that could be supported by various uses of ICT – for example to research, present, explore (through simulations, for instance) and investigate. For some activities it less likely that ICT would play a major or minor role, especially those which concern physical participation in activities, for example: Pupils should be able to take part in a Christmas carol service (LO1); Read from the Bible in a service of worship (LO1).

Measuring 50 per cent

The learning outcomes are regarded as being sufficiently numerous to be viable as the means of measuring the 50 per cent. The BBC is required not to exceed 50 per cent amenable coverage in any subject and key stage. For the purpose of this exercise, the learning outcomes are judged to be of broadly similar size: therefore the BBC may select up to half the learning outcomes for its resources at Key Stage 1.

Amenability statement

The following outcomes are judged to be not amenable in the Key Stage 1 *Proposals for a revised Core Syllabus in RE in Grant-Aided Schools in Northern Ireland*:

Pupils should be able to take part in a Christmas carol service (LO1);
Pupils should be able to read from the Bible in a service of worship (LO1);
Pupils should be able to go for a nature walk (LO1).

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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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.

2a)   The World Around Us (Technology) at Key Stage 2

Technology forms part of The World Around Us learning area at Key Stage 2. The statutory requirements are set out in bold in three strands:

- The Way We Live
- Movement
- Our World.

The statutory requirements connect learning from the different subjects, but include requirements particularly focused on technology:

- Investigate materials including their properties and uses (Our World)
- Develop competence in tools and techniques when designing and making objects or models relating to the strands (all three strands).

The requirements are intended to be interconnected, and to be developed in the context of each other. The statutory requirements in each strand bring together technology, science, history and geography in a holistic or integrated fashion (see section **4.3.4** of *ICT, amenability and the BBC digital curriculum service in Northern Ireland*). So it is anticipated that the investigation of materials, for example, will not be limited solely to the perspective of technology, but make use of the other perspectives (e.g. the history of technologies). For example, comparing the present time with the past could make use of comparison of materials and technologies specific to different eras. Additional guidance on specific aspects of learning for technology and science is, however, provided in non-statutory form to the teacher in a column under the statutory requirements.

Measuring 50 per cent

As the statutory requirements of the The World Around Us at Key Stage 2 form a set of inter-related holistic knowledge and skills, it is not appropriate, for the reasons given in section **4.5** of Becta's report, to measure the 50 per cent in terms of these requirements.

Therefore Becta will look to CCEA for detailed advice in assessing the BBC's coverage plans with regard to the 50 per cent condition.

Amenability statement

Based on both inspection of the statutory requirements and the additional non-statutory guidelines for technology, Becta finds 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 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.

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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 the BBC take account of the advice provided in the revised Northern Ireland Curriculum 4–14, available on the CCEA website [**http://www.ccea.org.uk/**].

3a)   Art and Design strand at Key Stage 3

The statutory requirements of the programme of study are set out in bold under column 1, Knowledge, Understanding and Skills; further statutory requirements are set out in bold in columns 2, 3 and 4 (curriculum objectives) and under learning outcomes. The knowledge, understanding and skills requirements provide opportunities for pupils to research and interpret; to develop their understanding and appreciation of artists, materials, techniques and tools; to evaluate work and to use a range of materials, tools and processes. While the range of tactile and sensory experiences cannot be provided by ICT alone, there are many ways in which ICT can support learning, for example by modelling processes, and as a tool for recording and investigation.

It should be noted that the statutory requirements together describe a set of inter-related holistic skills of the type described in section **4.3.4** of *ICT, amenability and the BBC digital curriculum service in Northern Ireland*. Since pupils develop these skills in the context of each other – for example, developing understanding in relation to evaluating work – 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 per cent

Since the requirements of the programme of study for art and design at Key Stage 3 form a holistic set of knowledge and skills, for the reasons given in section **4.5** it is not appropriate to measure coverage of the subject in terms of its learning outcomes.

Becta will consult with CCEA on the BBC's commissioning plans in making judgements on the 50 per cent.

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 art and design strand, Becta finds that there are no outcomes judged to be not amenable.

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.

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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 the BBC take account of the advice provided in the revised Northern Ireland Curriculum 4–14, available on the CCEA website [**http://www.ccea.org.uk/**].

3b)   Physical Education at Key Stage 3

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

The statutory requirements set out in bold in column 1 refer to the development of knowledge, understanding and skills. In the context of a 'balanced programme of Athletics, Games (invasion, fielding/striking, and net/wall), Gymnastics, Swimming, Dance and Outdoor education', learners develop skills and knowledge relevant to these activities as well as a range of understanding, skills and knowledge including: monitoring and understanding of short-terms effects of activity on the body; monitoring and evaluating their own activity; analysing the activity of others; developing skills of problem-solving, teamwork and so on.

Overall PE is a practical subject during which children are given opportunities to develop a range of physical skills. However, there is a variety of ways in which ICT can facilitate teaching and learning, enhance the quality of skills and improve future participation and performance. For example, technology can be used to provide visual demonstrations to initiate the learning of a new skill or to improve performance; it can be used as a supplement to verbal feedback and is also an important aspect of developing children's observational and evaluative assessment. ICT can also be used effectively to record, measure and present data related to performance, for example, when measuring heart rate, times and distances.

Measuring 50 per cent

PE at Key Stage 3 forms a holistic knowledge/skill set, therefore, for the reasons given in section **4.5**, it is not appropriate to measure coverage of the subject in terms of its learning outcomes. Becta will consult with CCEA on the BBC commissioning plans in making judgements on the 50 per cent.

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 PE, Becta finds that there are no outcomes judged to be not amenable to ICT. It is emphasised that PE must remain a practical subject and ICT should only be used to enhance the quality of teaching and learning.

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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3c)   PSHE (Personal Development Strand) at Key Stage 3

The Personal Development Strand is set out under the Learning for Life and Work area and includes PSHE. The PSHE element is set out under two columns that contain statutory requirements in bold: (i) Key Concept – Personal Understanding; (ii) Key Concept – Relationships. The statutory requirements under each heading provide an entitlement to learners to explore key issues in personal and social development. These include, for example, personal safety, friendship, sexual maturation, and the effects of legal and illegal substances.

The requirements of personal and social development are holistic in nature, and for the reasons set out in section **4.3.4**, holistic knowledge and skills are considered, for the purpose of the exercise, amenable to being taught via ICT, but as stated in section **4.5** are not included in the assessment of 50 per cent.

It is certainly the case that ICT can be a significant support to learning in this area, for example, as a tool for investigation (e.g. exploring the effects of substances on the body); in modelling moral and social scenarios to explore; and as a source of information. In addition, the important role that ICT already plays in young people's lives (especially for social communication) highlights its broad relevance as a theme in personal development.

Measuring 50 per cent

Becta will look to CCEA for advice in assessing the 50 per cent condition.

Amenability statement

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

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Context

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3d) Thinking skills, 11–16

'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; whether skills can be transferred from context to context. Thinking skills programmes have a notable history in Northern Ireland (the ACTS programme, for example, was developed at Queen's University, Belfast). The new Northern Ireland curriculum has built on this experience, and its skills and capabilities framework sets out thinking skills as a significant dimension. The goal of the framework is to infuse these skills and capabilities across all areas of learning. This approach clarifies that 'thinking skills' is not a 'subject' from the viewpoint of the curriculum.

In Northern Ireland, the critical and creative thinking skills are set out under the following main headings:

- Managing information
- Creativity
- Problem solving/decision making.

The framework provides further detail under each of these headings.

It should be emphasised that in pedagogical terms thinking skills are usually taught together, in an integrated fashion.

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 can have a role in thinking skills, whether, for example, as a tool, stimulus, or source of information.

Measuring 50 per cent

Given that thinking skills is not a subject in its own right, it is not appropriate to measure coverage against a particular order, or against a particular version or set of skills (for which good pedagogy demands that the skills be seen as inter-related).

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

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 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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4a)   Local and Global Citizenship at Key Stage 4

It should be noted that the new curriculum is under legislation, and therefore it is possible that the curriculum documentation under review here may be subject to change. The curriculum for Local and Global Citizenship is intended to provide learners with opportunities to learn how to participate effectively in society; to explore and express values and attitudes about 'cultural, political, economic, personal and social issues in contemporary society'; to develop skills of critical evaluation; and to explore fundamental questions such as 'What rights and responsibilities do people have?'. The curriculum for Local and Global Citizenship is based around four key concepts:

- Diversity and inclusion
- Human rights and social responsibility
- Equality and social justice
- Democracy and active participation.

The key concepts are developed through a number of statutory requirements (in bold), for example:

> Young people should have opportunities to **investigate how and why conflict, including prejudice, stereotyping, sectarianism and racism may arise in the community. Investigate ways of managing conflict and promoting community relations, reconciliation.**
>
> (Key Concept: Diversity and inclusion)

This requirement also suggests one of the ways in which ICT can be valuable to learning and teaching: as a means to research global events and issues.

More broadly, it is clear that ICT has considerable scope and potential to support learning and teaching within the citizenship curriculum. We might mention three aspects which demonstrate this: as a tool for social communication; as a source of information and discovery; as a tool for exploration – for example, simulations which can help learners to explore aspects of conflicts and moral issues in the real world.

Measuring 50 per cent

Becta will consult with CCEA in assessing the BBC's commissioning plans and making the 50 per cent determination.

Amenability

There are no outcomes within the Key Stage 4 curriculum judged by Becta to be not amenable to being taught by 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.

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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.

5a)   Applied ICT at GCSE

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

The subject content of the GCSE in applied ICT is set out in the following three units:

- ICT tools and applications
- ICT in organisations
- ICT and society.

It is fundamental to the purpose of the course that learners utilise ICT throughout their study. The specification is intended to develop a broad range of ICT skills, knowledge and uses in vocational contexts. Candidates should experience ICT in the environment – for example in workplaces, organisations and society.

There is a significant quantity of subject content also, including work on a wide range of ICT tools and applications. ICT learning resources are likely to be valuable to candidates. Candidates are also required to learn about why and how companies use ICT, and again it is likely that ICT-based learning resources will be valuable to learners.

Measuring 50 per cent

In this subject, the GCSE syllabuses must be used as the basis for the determination of 50 per cent.

Amenability statement

Becta finds 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-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.

5b)   Art and design at GCSE

The learning requirements for art and design at GCSE are set out in the subject criteria developed by CCEA and approved for teaching by the regulatory authorities in Northern Ireland, England and Wales. These criteria have been examined for amenability to ICT.

The ranges of skills associated with the learning and teaching of art and design such as evaluating, appreciating, responding and so on, are of the sort described in section **4.3.4** for which good pedagogy demands that they be taught and learnt in an integrated fashion. For the reasons given in section **4.5** such skills are not included in the 50 per cent measures.

In terms of knowledge and understanding, candidates are required to study: how ideas, meanings and feelings are conveyed in images and art works; processes of craft and design in their chosen areas of study; the social, cultural and historical contexts of art and artifacts; a variety of approaches, methods and intentions relating to continuity and change in their areas of study. In all these areas, ICT is likely to be a valuable tool and resource for study, or in some instances, an object of study in its own right – for example in relation to craft and design processes.

Measuring 50 per cent

In this subject, the GCSE subject criteria (syllabuses) must be used as the basis for the determination of the 50 per cent.

Amenability statement

Becta finds 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 the 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.

5c)   Engineering at GCSE

Engineering is one of a number of vocational GCSEs. The subject criteria have been developed by CCEA and approved for teaching by the regulatory authorities in Northern Ireland, England and Wales. The specification is designed to introduce and to develop the required broad technical knowledge, skills and understanding in the subject. The requirements for knowledge, skills and understanding have been examined for amenability.

The specification consists of three assessed units:

- Design and graphical communication
- Engineered products
- Application of technology.

There is a substantial range of content including learning about materials and technologies which is required in the units. This fact underlines one of the potential uses of ICT – as a tool for research and as a source of information.

It should also be clearly noted that in coming to judgements about the amenability of the requirements of the specification, the vocational GCSE requires learners to be involved in the design and making of real products. ICT has a notable role to play in this as the specifications require that learners must be able to use computer-aided design (CAD) and link it to computer-aided manufacture (CAM).

Overall, it is reasonable to conclude that ICT in various forms will frequently be useful and often essential to learners.

Measuring 50 per cent

In this subject the GCSE specification (syllabuses) must be used in the determination of 50 per cent.

Amenability statement

Becta finds that there are no outcomes judged to be not amenable in the specification.

In this case, as elsewhere, Becta's judgement on the amenability of learning outcomes is restricted to the purposes of the 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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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.

5d)   Health and Social Care at GCSE

The learning requirements for Applied Health and Social Care at GCSE are set out in the subject criteria developed by CCEA and approved for teaching by the regulatory authorities in Northern Ireland, England and Wales. These requirements have been examined for their amenability to ICT.

GCSE syllabuses in this subject must include the following three units:

- Health, Social Care, and Early Years Provision
- Promoting Health and Well-being
- Understanding Personal Development and Relationships.

Each of these units contains knowledge, skills and understanding requirements. Given the range of knowledge, skills and understanding required in the units, it is certainly the case that ICT offers significant opportunities for learners: for example, as a source of information, as a research tool, to model situations and contexts and so on.

Overall, the specification requires that learners investigate many areas of health and care including policy, and therefore it is very likely that ICT will be a key resource for learners.

Measuring 50 per cent

In this subject the GCSE specification (syllabuses) must be used in the determination of 50 per cent.

Amenability statement

Becta finds that there are no outcomes judged to be not amenable in the specification.

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Context

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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.

5e)   History at GCSE

The learning requirements for history at GCSE are set out in the subject criteria developed by CCEA. These criteria have been examined for amenability to ICT.

The subject content of the CCEA specification presents a number of historical periods as contexts for learning and teaching. Candidates are required to study two periods in depth and to undertake a further outline study. One in-depth study must be selected from the following titles: Germany; Russia; or the USA between 1916/1918–1941; the other in-depth study option relates to the relationships between Britain, Northern Ireland and Ireland in the twentieth century. The outline study requires study of significant events, developments and personalities between c1945–c1991 such as the Cold War. Clearly there are a variety of ways in which ICT is able to support development of knowledge of the study areas, and investigation of the topic selected – for example, as a tool for research.

The ranges of skills associated with the learning and teaching of history such as investigation, interpretation and so on, are of the sort described in section **4.3.4** for which good pedagogy demands that they be taught and learnt in an integrated fashion. For the reasons given in section **4.5** such skills are not included in the 50 per cent measures.

Measuring 50 per cent

In this subject, the GCSE specification should be used as the basis for the determination of the 50 per cent.

Amenability statement

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

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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.

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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.

5f) Hospitality and catering at GCSE

The learning requirements for Hospitality and Catering GCSE are set out in the WJEC syllabus and approved for teaching by the regulatory authorities in Wales, England and Northern Ireland. The requirements have been examined for amenability.

As with all vocational subjects, the ability to apply skills, knowledge and understanding to real working contexts is central. The requirement in the specification for a wide range of knowledge, skills and understanding to be developed in work-related contexts strongly suggests a valuable role for ICT-based resources. In addition, ICT systems and uses are a significant feature in many real world hospitality and catering contexts - a fact which further underlines the importance of ICT to learners taking the course. While ICT is not a substitute for practical experience (such as in food preparation), ICT can support the development of associated knowledge and understanding such as relevant terminology, processes, standards and the common health, safety and hygiene hazards.

Measuring 50 per cent

This qualification is available as a single (1 GCSE) or double (2 GCSE) award. In this subject the specification produced by WJEC for each award must be used as the basis for the determination of 50 per cent.

Amenability statement

Becta finds 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-based resources.

Context

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5g)   Music at GCSE

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

The skills of performing, composing and appraising are fundamental to GCSE. These skills are holistic or integrated skills of the type described in section **4.3.4**, and for the reasons given in section **4.5** are not included in the 50 per cent assessment.

Content for study in music at GCSE specifications is set out in 'areas of study', at least two of which must be based on the Western classical tradition; one area of study must draw together at least two different cultures (e.g. Indian raga, African music); and at least one area of study must be used to develop an understanding of the impact of ICT in music. It is certainly the case that ICT has considerable potential to support learning in all areas of content. In addition ICT is already widely used in performance, appraisal and composition through a variety of online resources, tools for composition, editing and so on.

Measuring 50 per cent

In this subject the GCSE specification (syllabuses) must be used as the basis for the determination of 50 per cent.

Amenability statement

Becta finds 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 the 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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