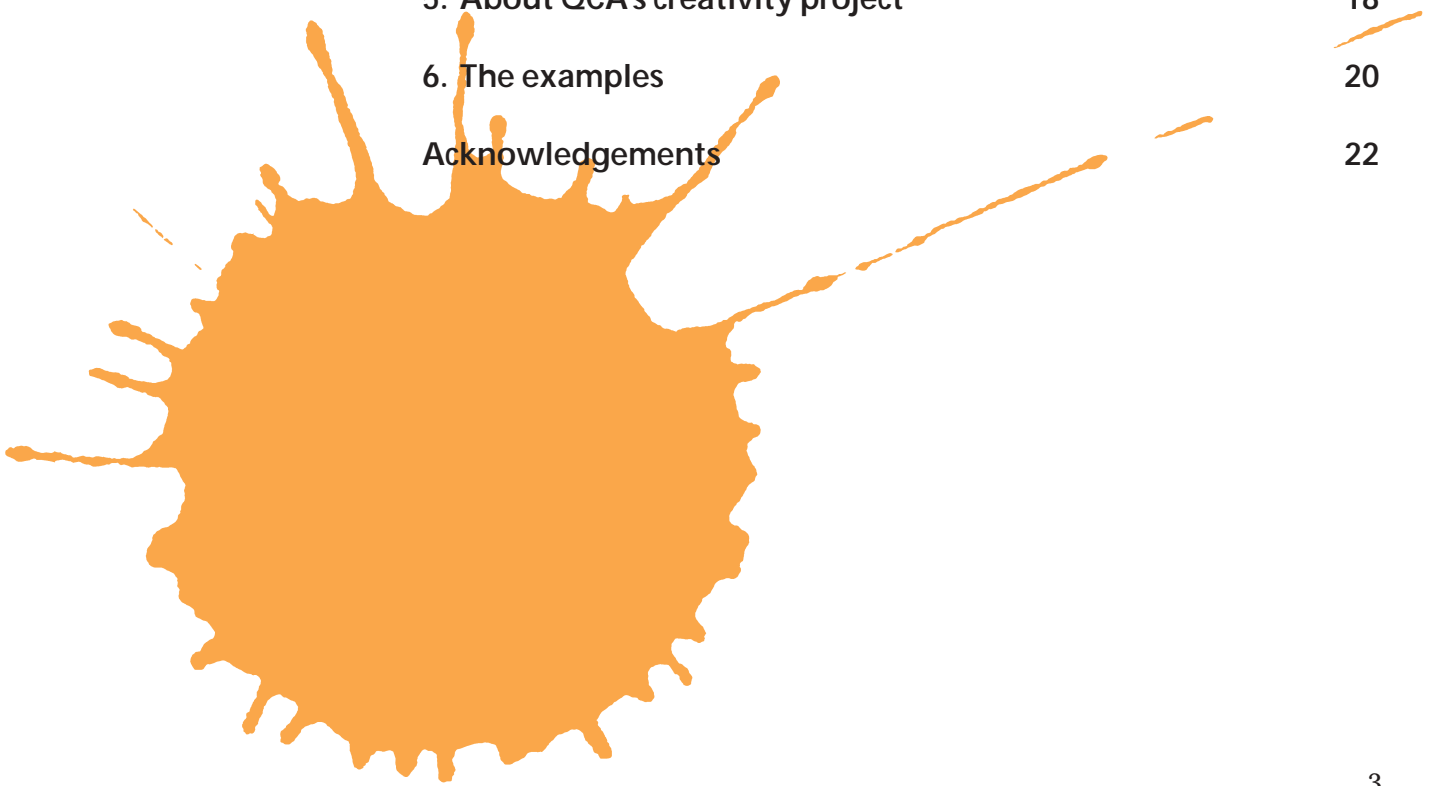# Creativity:
find it, promote it

Promoting pupils' creative thinking and behaviour across the curriculum at key stages 1, 2 and 3

Practical materials for schools

QCA

Creativity:
find it, promote it

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behaviour across the curriculum at key
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Contents

Foreword

In 2000, the review of the national curriculum emphasised creativity as an important aim. The Secretary of State for Education and Skills asked QCA to follow up this review by investigating how schools can promote pupils' creativity through the national curriculum.

Over the past three years, QCA has worked with 120 schools to investigate how they could develop pupils' creativity through their existing schemes of work and lesson plans.

The outcome of this investigation is *Creativity: find it, promote it*, an on-line resource for teachers. You can find this at www.qca.org.uk/creativity

The website:

■ shows pupils thinking and behaving creatively across the national curriculum and religious education at key stages 1 to 3

■ offers information and guidance to teachers on recognising and promoting pupils' creativity.

In visiting the website, many people have expressed interest in obtaining a print version of *Creativity: find it, promote it*. These materials are published in response to this demand.

Introduction

About this booklet

Who is this for?

This booklet is intended mainly for teachers, headteachers, senior managers and governors, although others with an interest in education may find it useful. While this booklet focuses on key stages 1, 2 and 3, many of the issues it explores are relevant to the foundation stage and to post-14 education.

What does it contain?

This booklet contains information and guidance. It is based on the materials on **Creativity: find it, promote it**, QCA's on-line resource designed to promote creative learning and teaching across the curriculum. The booklet is in six sections.

Section 1 explores a definition of creativity and its characteristics.

Section 2 recognises that promoting creativity is an important aim of the national curriculum and outlines some of the important gains that come from fostering pupils' creativity throughout education.

Section 3 provides information to help teachers identify when pupils are thinking and behaving creatively.

Section 4 provides guidance on promoting pupils' creativity in the classroom and throughout the school.

Section 5 gives information about the three-year investigation that QCA undertook to develop these materials and about our future work.

Section 6 explains the selection of examples that accompany this booklet and what they show about pupils' creative thinking and behaviour.

Using this booklet and the examples

Sections 1, 2 and 3 could provide a starting point to:

■ discuss what pupils and teachers think is meant by creativity

■ reconsider the school's learning and teaching policy and how pupils' creativity is currently being promoted through their school's curriculum.

In section 4 'How to promote pupils' creativity', there are suggestions about:

- ways that planning and teaching can be focused on promoting pupils' creativity within each teacher's existing curriculum plans

- how teams of teachers can develop a shared understanding of creativity and a consistent approach to promoting pupils' creativity across a subject team, a year group or a key stage

- how senior managers might develop an ethos that supports more creative learning and teaching throughout the school.

Sections 3 and 4, together with the examples that come with this booklet, could provide a focus for:

- analysing the evidence of pupils' creative thinking and behaviour and the learning and teaching strategies that promote this

- identifying and discussing the possibilities for applying these strategies to different subjects and contexts.

1. What is creativity?

What comes to mind when you think of creativity? People being imaginative, inventive, taking risks and challenging convention? Do you think about originality and the value of what people produce? Perhaps you think you can only be creative if you are artistic.

A good starting point for defining creativity is 'All our futures: Creativity, culture and education', the National Advisory Committee for Creativity and Culture in Education's report (DfEE, 1999). This report states that we are all, or can be, creative to a lesser or greater degree if we are given the opportunity. The definition of creativity in the report (page 29) is broken down into four characteristics.

First, they [the characteristics of creativity] always involve thinking or behaving **imaginatively**. Second, overall this imaginative activity is **purposeful**: that is, it is directed to achieving an objective. Third, these processes must generate something **original**. Fourth, the outcome must be of **value** in relation to the objective.

Debating the characteristics highlighted by this definition can be a helpful starting point for agreeing what your school actually means by creativity.

IMAGINATION AND PURPOSE

Imagination is definitely a key part of creativity. But are all imaginative ideas creative?

Suppose someone imagined a blue and white striped unicorn. Would this be creative? It may be that no one has conjured up a unicorn like this before. But what is the point of the idea? If someone thinks of an imaginative idea like this and then does not take it any further, are they creative?

Creative people are purposeful as well as imaginative. Their imaginative activity is directed at achieving an objective (although this objective may change over time).

ORIGINALITY

What do we mean by originality? What might we mean by originality when we are talking about pupils' learning? Original in relation to their previous work? Other pupils' work? Work that has gained public recognition?

When pupils are writing a poem, choreographing a dance or producing a painting, their work can be unique if it expresses their ideas and feelings. But what about work in subjects like science, history and maths? While it would be wonderful for a pupil to be the first person to discover a new scientific principle, this is highly unlikely. Does this mean that pupils can't be creative in these subjects?

Not at all. Skilled teachers can help pupils tackle questions, solve problems and have ideas that are **new to them**. This makes pupils' ideas original, the result of genuinely creative behaviour.

VALUE

Imaginative activity can only be creative if it is of value in relation to its purpose: if it satisfies what pupils set out to achieve. They need to ask questions such as, 'Is it a good…?', 'Does it do the job…?'

Pupils will need help to judge the value of what they and others have done: to evaluate critically what they have achieved. Is it, for example, useful? Aesthetically pleasing? A valid solution? Does it work?

Some acts might be highly imaginative and original, but harm someone or destroy something. Are we happy with this kind of creativity?

Teachers will have a view about what is worthwhile and valuable; pupils may differ. Sharing judgements together can give the teacher insights into what pupils value.

2. Why is creativity so important?

CREATIVITY IMPROVES PUPILS' SELF-ESTEEM, MOTIVATION AND ACHIEVEMENT

Pupils who are encouraged to think creatively and independently become:

- more interested in discovering things for themselves

- more open to new ideas

- keen to work with others to explore ideas

- willing to work beyond lesson time when pursuing an idea or vision.

As a result, their pace of learning, levels of achievement and self-esteem increase.

CREATIVITY PREPARES PUPILS FOR LIFE: AN IMPORTANT AIM OF THE NATIONAL CURRICULUM

The *National Curriculum Handbook* outlines the importance of creativity:

'By providing rich and varied contexts for pupils to acquire, develop and apply a broad range of knowledge, understanding and skills, the curriculum should enable pupils to **think creatively and critically, to solve problems and to make a difference for the better.** It should give them the opportunity to become **creative, innovative, enterprising** and capable of leadership to equip them for their future lives as workers and citizens.

It should enable pupils to **respond positively to opportunities, challenges and responsibilities, to manage risk and to cope with change and adversity.**'

The National Curriculum: Handbook for teachers in England (page 11).

Creative thinking and behaviour can be promoted in all national curriculum subjects and in religious education.

Pupils who are creative will be prepared for a rapidly changing world, where they may have to adapt to several careers in a lifetime. Many employers want people who see connections, have bright ideas, are innovative, communicate and work well with others and are able to solve problems. In other words, they need creative people.

CREATIVITY ENRICHES PUPILS' LIVES

By promoting creativity, teachers can give all pupils the opportunity to discover and pursue their particular interests and talents. We are all, or can be, creative to some degree. Creative pupils lead richer lives and, in the longer term, make a valuable contribution to society.

3. How can you spot creativity?

When pupils are thinking and behaving creatively in the classroom, you are likely to see them:

- questioning and challenging

- making connections and seeing relationships

- envisaging what might be

- exploring ideas, keeping options open

- reflecting critically on ideas, actions and outcomes.

QUESTIONING AND CHALLENGING

Creative pupils are curious, question and challenge, and don't always follow rules. They:

- ask 'why?' 'how?' 'what if?'

- ask unusual questions

- respond to ideas, questions, tasks or problems in a surprising way

- challenge conventions and their own and others' assumptions

- think independently.

For example

In 'The acid test' (see example number 10), Stephen was relentless in asking questions in a lesson on acids and alkalis. Having noticed that the pupils in his class were all using different amounts of acid and alkali in their experiments, he asked, 'If we all used the same amount of acid and alkali, would we get exactly the same colour?' The class tried this and Stephen questioned the result yet again: 'If the amount of acid and alkali was the same, why didn't we get a neutral green colour?' This led to another heated class discussion.

MAKING CONNECTIONS AND SEEING RELATIONSHIPS

Creative pupils think laterally and make associations between things that are not usually connected. They:

- recognise the significance of their knowledge and previous experience

- use analogies and metaphors

- generalise from information and experience, searching for trends and patterns

- reinterpret and apply their learning in new contexts

- communicate their ideas in novel or unexpected ways.

For example

In 'Tasty maths' (see example number 11) pupils realised that their knowledge of mass, area, volume and enlargement would help them solve a problem about the relative size of two sweets. The pupils worked in pairs, reinterpreting their mathematical knowledge and hypothesising and testing different theories about the accuracy of claims in a TV advertisement for the sweets.

ENVISAGING WHAT MIGHT BE

Creative pupils speculate about possibilities. They:

- imagine, seeing things in the mind's eye

- see possibilities, problems and challenges

- ask 'what if?'

- visualise alternatives

- look at and think about things differently and from different points of view.

For example

In 'The creepy polar bear' (see example number 1) the children kept the image of a cold wind in their mind's eye while experimenting with different sounds that reflected their thoughts and feelings about the cold. They wanted to get the right balance of loud, soft, frequent and spasmodic sounds. Open questioning helped to expand the children's imaginations and encouraged them to think about how they might represent what they had envisaged about the Arctic's atmosphere in music.

EXPLORING IDEAS, KEEPING OPTIONS OPEN

Creative pupils explore possibilities, keep their options open and learn to cope with the uncertainty that this brings. They:

- play with ideas, experiment, try alternatives and fresh approaches

- respond intuitively and trust their intuition

- anticipate and overcome difficulties, following an idea through

- keep an open mind, adapting and modifying their ideas to achieve creative results.

For example

In 'The surfing ballerina' (see example number 5), the visit of a toy maker inspired pupils to come up with exciting and original ideas. The pupils experimented with different ways of producing movement using mechanisms

and components, anticipating and overcoming difficulties along the way. Most pupils modified their initial idea as they reflected on and developed their design. In some cases, pupils continued to keep their options open. Some changed their designs during the making of their toys as they discovered new possibilities or better solutions. Poppy's surfer became a vegetable ballerina on a surfboard!

REFLECTING CRITICALLY ON IDEAS, ACTIONS AND OUTCOMES

Creative pupils are able to evaluate critically what they do. They:

- review progress, ask 'is this a good…?' 'is this what is needed?'

- invite feedback and incorporate this as needed

- put forward constructive comments, ideas, explanations and ways of doing things

- make perceptive observations about originality and value.

For example

In 'Like hockey, but different' (see example number 12) pupils were asked to create a game that would help players practise the passing and receiving skills needed to improve their performance in hockey. One group of pupils invented a novel game of 'rounders ball'. However, after playing the game a couple of times, they reviewed what they had done and decided that it didn't provide enough of a challenge. In the light of this, they included some more demanding features, for example they narrowed the distance between the cones that players were expected to negotiate.

4. How can you promote creativity?

HOW CAN TEACHERS PROMOTE CREATIVITY?

Teachers can promote pupils' creativity by:

- planning tasks and activities that give pupils opportunities to be creative

- teaching in a way that makes the most of pupils' creativity.

It is vital to get the pitch of an activity right from the outset. Unrealistically high expectations cause frustration and anxiety, inhibiting creativity. Unrealistically low expectations induce boredom and cause pupils to switch off.

So what should you do to **promote creativity when planning?**

Set a clear purpose for pupils' work

- look for opportunities to promote creative responses in your existing schemes of work and lesson plans

- set clear learning objectives and build specific creativity objectives into planning; integrate these with subject-specific objectives

- structure a sequence of lessons, taking pupils through the creative process step by step; don't be too ambitious about what pupils can achieve in one lesson

- share objectives with pupils; this will help them to sustain their efforts over long periods

- plan for pupils to share their work with others; this tends to be very motivating.

Be clear about freedoms and constraints

- give pupils opportunities to choose ways of working and to shape the process, direction of work or outcome

- use a range of learning styles, for example practical experimentation and problem solving, role-play and dance, visual materials such as diagrams and cartoons, small group discussion and collaboration

- give pupils a clear brief

- limit time, scale or resources; constraints can stimulate new ways of working and improvisation.

Fire pupils' imagination through other learning and experiences

- give pupils first-hand experiences through visits and contact with creative people

- use stimulating starting points such as artefacts, problems, stories with human interest, topical events

- make activities relevant to pupils' lives

- build on what pupils find interesting and have already experienced both in and out of school

- look for opportunities to encourage pupils to apply their prior learning creatively

- give pupils opportunities to reflect on and share personal experiences and feelings.

Give pupils opportunities to work together

- give pupils opportunities to work with others from their class, year group and different age groups

- structure collaborative activities; if pupils have free choice, they often choose restrictive, gender-based groups

- monitor and manage the collaborative process carefully

- address the needs of individuals in each group.

Once an activity is underway, teachers can actively foster pupils' creativity in a number of ways. You could try some of the approaches below, or some of the ideas in the examples of pupils' creativity on the website.

So what should you do to **promote creativity when teaching?**

Establish criteria for success

- help pupils to develop criteria that they can use to judge their own success, in particular, the originality and value of their work (eg asking, 'What makes a good...?')

- help pupils to appreciate the different qualities in others' work and to value ways of working that are different from their own.

Capitalise on unexpected learning opportunities

- actively pursue pupils' ideas (where these are likely to be productive), without losing sight of your original teaching objective

- make the most of unexpected events; this can help pupils to overcome their fear of the unknown, develop problem-solving skills and think imaginatively

- be ready to put aside your lesson plan and 'go with the moment' if you judge this would be more effective for pupils' learning.

Ask open-ended questions and encourage critical reflection

- ask questions such as 'What if...?', 'Why is...?' and 'How might you...?' to help pupils see things from different perspectives and come up with new ideas

- encourage openness to ideas

- be willing to stand back and not give all the answers but provide helpful prompts, if necessary, modelling flexible and independent thinking and behaviour for pupils.

Regularly review work in progress

- regularly stop to review work in progress, discuss the problems pupils are facing and how they can solve them

- encourage pupils to share ideas with others and to talk about their progress

- help pupils to give and receive constructive feedback (confidence and communication skills are vital for this)

- reassure pupils that they can take forward someone else's idea if they think it is more successful than their own (while encouraging them to recognise that it is also acceptable to be different).

You might find it helpful to collect evidence of how pupils respond in different lessons. Capture selected pupils' responses on paper, video or audiotape, or ask a colleague to observe pupils and note what happens during a lesson. What does this tell you about individuals? The class? Your teaching style? The classroom environment? What can you learn from pupils' responses to help you develop their creativity and your skills as a teacher?

HOW CAN TEAMS OF TEACHERS PROMOTE CREATIVITY?

As a team, department, faculty or school, it is important that you share a common understanding of and expectations about creativity.

You could begin by talking about some of the examples of pupils' creativity that accompany this booklet or others that you will find on the website. Make this a starting point for reviewing your own teaching strategies (you could use the above checklists).

How could you work together to improve pupils' ability to ask questions? To explore ideas and alternatives? To evaluate ideas and actions?

What aspects of pupils' creative thinking and behaviour might best be promoted through your particular subject?

Ask each teacher in your team to identify an opportunity for promoting pupils' creativity in a planned lesson or activity and to build a creativity objective into the subject-specific objectives (for example to promote pupils' ability to ask questions or explore ideas).

As a team, talk about how you could achieve these creativity objectives. After the lessons, come back together as a team and compare and discuss outcomes.

HOW CAN SENIOR MANAGERS AND GOVERNORS PROMOTE CREATIVITY?

Senior managers and governors play a vital role in establishing an environment in which creativity can flourish. The following checklist outlines some of the key steps they can take towards promoting pupils' creativity throughout the school.

Value creativity as a school

- build an expectation of creativity into your school's learning and teaching policy

- make sure that you value the creative process as well as the final product or outcome

- show and share tangible changes that result from creativity

- consider involving all the school in an event to experience and celebrate creative learning.

Encourage professional learning and development

- develop a shared understanding of what your school means by creative learning

- lead a staff meeting on how teachers promote pupils' creativity

- encourage the collaborative redesign of lessons

- make sure teachers have time to work together to plan learning in more creative ways.

Build partnerships to enrich learning

- work with higher education and other agencies to get new ideas and access to resources

- ask your LEA for support; it might be able to put you in contact with other schools focusing on creativity

- work with external professionals, such as a dance group, to help change the school's ethos.

Provide opportunities for pupils to work with creative people

- provide opportunities for pupils to work with artists, musicians, performers, designers and other creative professionals

- agree and provide key entitlements, such as the opportunity to work with artists, go to a theatre or learn a musical instrument

- tap into the creativity of staff, parents and the local community.

Provide a stimulating physical environment

- make sure that pupils have the space they need to be creative; for example, space for movement in dance and drama, to create on a large scale in art and design

- make sure that pupils have the resources they need to be creative; for example, high-quality materials, tools, apparatus, equipment

- give pupils access to film, video and the internet, which can help them to connect their learning to everyday experiences

- stimulate pupils' curiosity by ensuring they have first-hand experience of natural and made objects, and the natural and built environments

- involve pupils in creating a stimulating environment; for example, they could help redesign the playground, improve the school's built and natural spaces, develop murals

- celebrate creative learning in shared spaces, classrooms, outside areas and beyond school.

Manage time effectively

- give pupils opportunities to explore, concentrate for extended periods of time, reflect, discuss and review

- allow some flexibility in timetabling lessons, so that plans can be adjusted quickly

- give pupils sustained time for some work; for example a whole afternoon instead of two separate lessons in a week

- from time to time, set up a weekly project across the whole school, with a focus on creative learning

- allocate time to being more adventurous; for example a day or week every term when you encourage staff to try out different approaches.

Celebrate pupils' creativity

- encourage, recognise and reward pupils' creativity with words of praise and certificates of achievement

- ask teachers to nominate quality examples of creative activities and responses and celebrate these at a school or year assembly for parents

- encourage pupils to value the creativity of their peers.

5. About QCA's creativity project

In 2000, the review of the national curriculum emphasised creativity as an important aim. The Secretary of State for Education and Skills asked QCA to follow up this review by investigating how schools can promote pupils' creativity through the national curriculum.

WHAT DID WE DO?

We focused on key stages 1, 2 and 3.

In the first year of the project, we looked at how other countries were promoting creativity. We looked at their policies and curriculum requirements, and analysed a wide range of literature and research findings.

In the second year, we worked with 120 teachers in England to investigate how they could develop pupils' creativity through their existing schemes of work and lesson plans. We adopted the definition of creativity in 'All our futures: Creativity, culture and education' (DfEE, 1999), a report from the National Advisory Committee for Creativity and Culture in Education (see What is creativity?). We also drew on the previous year's research and discussions with experts as a basis for the work with schools. We asked the teachers to:

■ identify the most effective ways to plan for, and foster, pupils' creativity

■ collect examples of pupils' creative thinking and behaviour

■ decide how the learning environment can best support the creative process.

The teachers looked through their plans for a term and chose lessons that they thought had potential for promoting pupils' creativity. They then adjusted their planning to maximise this potential, recording what happened and collecting evidence of pupils' creativity. They considered whether they had changed their teaching approach and the learning environment and reflected on what happened.

We used the teachers' experiences to help us develop a set of information sheets and examples for teachers. We sent these materials to 1,000 teachers, headteachers, advisers, teacher educators and other people who work with schools, and asked them to complete a questionnaire telling us what they thought of them. We refined the materials in the light of their feedback and the *Creativity: find it, promote it* website is the result.

WHAT DID WE LEARN?

Initially, the teachers involved in the project had very specific views on how to promote pupils' creativity. Some thought that creativity arose from unplanned

or unstructured activities. Others thought that activities such as role-play, visits and debates were the key. Many art and design and music teachers assumed that because their subjects involve a creative process, pupils were thinking and behaving creatively all the time.

As the project progressed, the teachers began to realise that creating something is not the same thing as being creative. They saw that being creative has as much to do with the quality of thought taking place and the process or journey as with what is ultimately produced. They also discovered that creativity can happen in extended project work, discussion and short question-and-answer sessions.

Often, teachers identified a creative moment in a lesson, a moment when there appeared to be a breakthrough in thinking. This was almost always the result of much hard work on the part of individuals or groups of pupils. Teachers also realised that creativity did not happen in a vacuum. Pupils needed subject-specific knowledge and skills for their creativity to flourish.

By the end of the project, all of the teachers agreed that:

- opportunities for creativity arise in all types of activities

- by making only minor adjustments to their lesson plans, they could promote creativity

- to teach creatively, they needed to feel confident in their skills and subject knowledge

- sharing practice with teachers of other subjects and age groups was helpful

- pupils can't be expected to think and behave creatively in every single lesson

- thinking and behaving creatively is not appropriate in all lessons.

Many of the teachers involved in the project also believe that if creative thinking and behaviour are to become part of pupils' life in school, they must be expected and valued by the school as a whole.

WHAT NEXT?

We want to continue to learn from schools by:

- continuing to investigate how to promote pupils' creative thinking and behaviour

- learning from the creative ways that teachers and headteachers overcome obstacles in supporting a learning environment that promotes creativity.

If you would like to contribute to the ongoing work of the project, go to www.qca.org.uk/creativity and tell us about how you have been promoting pupils' creativity in your classroom and school.

6. The examples

The examples accompanying this booklet are a selection to show how a range of schools, including special schools, set about promoting pupils' creativity in their particular circumstances.

The examples try to highlight the key characteristics and evidence of pupils' creative thinking and behaviour and what the teacher plans and does in order to support this.

The selected examples do not attempt to cover all subjects at key stages 1, 2 and 3. They do not include PSHE and citizenship or the foundation stage. However, they are less to do with the subject or the key stage than the learning and teaching that takes place.

Most of the examples take place in lesson time and in the classroom. In some cases the creative thinking or behaviour comes from an individual pupil; in others, a group of pupils presents innovative ideas or outcomes.

The following chart provides a list of the examples and highlights the creative learning that takes place.

There are more examples on the *Creativity: find it, promote it* website at www.qca.org.uk/creativity

No.	Title of example	Subject	What does it show about pupils' creative thinking and behaviour?
1	Creepy polar bear	Music	Making connections Envisaging what might be Exploring ideas
2	Exploding myths	History	Questioning and challenging Making connections Envisaging what might be Exploring ideas
3	A giant's eye view	English (drama)	Envisaging what might be Exploring ideas
4	Where do sounds belong?	Science	Questioning and challenging Making connections Envisaging what might be
5	Surfing ballerina	D&T	Making connections Envisaging what might be Exploring ideas

No.	Title of example	Subject	What does it show about pupils' creative thinking and behaviour?
6	Sensory perceptions	RE	Questioning and challenging Making connections Exploring ideas
7	Room for improvement	Art and design	Making connections Envisaging what might be Exploring ideas
8	Breaking new ground	ICT	Questioning and challenging Exploring ideas Reflecting critically
9	The sun talks with God	English	Questioning and challenging Making connections Envisaging what might be Reflecting critically
10	The acid test	Science	Questioning and challenging Envisaging what might be
11	Tasty maths	Maths	Making connections Exploring ideas
12	Like hockey, but different	PE	Questioning and challenging Exploring ideas Reflecting critically
13	The odd one out	MFL	Questioning and challenging Making connections Envisaging what might be
14	Enjoying while destroying	Geography	Making connections Envisaging what might be Exploring ideas Reflecting critically

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