



Qualifications and
Curriculum Authority

QCA

futures
MEETING THE CHALLENGE



'Education only flourishes if it successfully adapts to the demands and needs of the time.'

'The curriculum cannot remain static. It must be responsive to changes in society and the economy, and changes in the nature of schooling itself.'

NATIONAL CURRICULUM



What is the challenge?

Learners only flourish if education successfully adapts to the needs and demands of the time.

This year some 600,000 eager children will start school. They will leave their mark on the 21st century. The quality of the

school and curriculum they meet is crucial to their development.

These children will experience a curriculum that has many timeless values and purposes. However, the curriculum cannot remain static. The current national curriculum recognises that the way we organise learning must be responsive to change. If we are to provide an excellent education for all learners, our education system must be responsive to the changing demands of life and work in the 21st century.

- What forces for change should influence the development of our national curriculum?
- How should we adapt our system to meet the needs of the time?
- How do we guarantee an entitlement for all learners and at the same time allow scope for innovation and personalisation in the ways we organise learning?

While there is broad consensus about the underlying aims, purposes and values of education, there is also room for debate about the best way to organise learning to achieve our goals.

QCA futures: meeting the challenge aims to promote broad debate rather than consider specific reform. We want to ensure that curriculum development responds to changing demands and is informed by the latest and best thinking.

‘The best way to predict
the future is to build it.’

DOUGLAS ADAMS

The forces for change

QCA's research identifies the following forces for change.

- 1 Changes in society and the nature of work
- 2 The impact of technology
- 3 New understanding about learning
- 4 The need for greater personalisation and innovation
- 5 The increasing international dimension to life and work

1 Changes in society and the nature of work



Society and work have changed significantly in the last 30 years.

The UK has moved from a manufacturing economy to a service- and knowledge-based economy. In an increasingly technological world, jobs migrate between countries. The pattern of employment is moving from

a *job for life* to a *job for the life of the project*. People come from diverse backgrounds and individuals' lifestyles vary. These factors combine to create a markedly different working environment. In an uncertain future, those most likely to flourish are those who are flexible and equipped to learn and adapt.

Employers consistently identify the kind of people they want in their workplaces. They want people who are literate and numerate and have information technology skills. They look for people who can build and maintain relationships, work productively in teams and communicate effectively. They look for problem-solvers, people who take responsibility and make decisions and are flexible, adaptable and willing to learn new skills. The skills these people have can be developed in schools and cross subject boundaries.

When you ask young people about their experiences and aspirations for the future, many say that they expect their world to become more challenging. They say that school prepares them well for examinations but not enough for real life and work.

Questions

- What skills and knowledge will learners need so that they can flourish in the future?
- How should we develop a curriculum that better promotes the skills and knowledge needed for life and work in the 21st century?

2 The impact of technology



Technology permeates the workplace and young people's lives outside school. Substantial investment has been made in schools' information technology infrastructure and there are bold ambitions for e-learning and e-assessment.

Technology can influence when, where and how we learn. It will be an important driver in the way learning develops and will be increasingly harnessed to support teaching and improve the quality of assessment.

In a technology-rich world we need to review and modernise what and how we learn. Imagine how a graphic designer works today compared with 30 years ago. What should a modernised music, art or design curriculum be like? Does the way we describe the *content* of learning adequately reflect the impact of technology?

Basic technology skills are essential but not enough. An *e-confident* learner is able to make informed decisions about when and how to use these skills to support their learning. They may use technology as a tool for thinking, making or doing. Technology needs to be used more effectively to help develop learners' enquiry skills, logical reasoning, analytical thinking and creativity. It should support individualised and independent learning, while encouraging wider communication and collaborative learning.

Questions

- What will a technology-rich curriculum be like?
- What are the benefits and risks of e-learning and e-assessment?
- How is technology changing the practice of subjects in the world outside school and is this sufficiently reflected in the curriculum?

3 New understanding about learning



New understanding about how we learn is shaping the way many schools organise teaching.

Developments in neuroscience, for example, provide new insights into the way the brain works. We now know that intelligence is multi-dimensional, that an individual's capacity for

learning is linked to their emotional well-being and that people learn in a variety of ways.

Research tells us that an individual's self-image as a learner strongly determines their ability to maintain positive relationships and thrive in society and the workplace. When we are thinking about how best to promote this ability in individuals it becomes clear that *how* learning is organised is as important as *what* is learned.

Question

- What are the implications of new understanding about learning for the way we might organise the curriculum and subjects?

4 The need for greater personalisation and innovation



There is an increasing need for public services to be more responsive to the particular needs of individuals. Personalisation has been described as a dynamic combination of a greater *choice* of public services and a greater *voice* in the design of those services.

Many researchers have pointed out the effectiveness of using the voice of the learner to shape the curriculum and the organisation of learning.

The challenge for curriculum designers and subject communities is to identify how greater personalisation of learning can be achieved within the context of a national entitlement. We need an approach that allows for innovation and flexibility while guaranteeing an entitlement to high-quality educational outcomes. Some suggest that we should explore new approaches to curriculum development and that less prescription will promote innovation. We might develop a mechanism for feeding dialogue with stakeholders into curriculum evolution.

Questions

- How might a *national entitlement* be described and guaranteed in the context of increased choice and personalisation?
- What mechanisms might be developed to produce a more evolutionary approach to curriculum development?

5

The increasing international dimension to life and work



Global issues are part and parcel of young people's lives in a way that they never were in the past. Through television, the internet, ease of travel and diverse communities we are aware of a much wider variety of cultures, religions, art, sport, music and literature. There are new opportunities

to widen networks and communities and to broaden learners' experience and knowledge.

There are global challenges too. Many of the issues that young people will face in the future have international dimensions. National economies increasingly depend on international investment. Domestic companies contract work overseas. Environmental and sustainability issues transcend national boundaries. The impact of global poverty is far-reaching.

A 21st century curriculum should prepare young people to recognise their roles and responsibilities as members of this global society. They need to be able to understand the global context of their local lives, examine their own values and attitudes in relation to the challenges they face and see how they might play an active role in responding to these challenges.

Question

- How might the curriculum better equip pupils for the roles and responsibilities of global citizenship?

Welcome to the challenge

To make sure our curriculum provides a sound basis for learners in the 21st century, those involved in education need to address the questions raised by the forces for change in our society.

The challenge for subjects and sectors

- How effectively do subjects contribute to the wider aims, purposes and values of education?
- How do subjects need to evolve to respond to the challenges of life and work in the 21st century?
- How well does each subject exploit the potential of technology to support its aims? Does its use reflect practice in the wider world?

The challenge for curriculum designers

- How might we organise the national entitlement to deliver the curriculum's aims, purposes and values more effectively?
- Are the flexibilities of the current national frameworks sufficient to guarantee a good match between curriculum aims, design and delivery?
- Do we need to explore new ways of describing national entitlement?
- How can we adequately define future learner needs across subject boundaries?

The challenge for assessment

- While there is broad consensus about the wider aims and purposes of the curriculum, are these aims sufficiently embedded into our accountability and assessment systems?
- How do we ensure that measures of performance are sufficiently wide to guarantee a broad and balanced learning agenda?
- How can we ensure that what we assess keeps up to date with what we want learners to know, do and understand in a rapidly changing world?
- What are the benefits and risks associated with e-learning and e-assessment?

Next steps

QCA will provide a forum for debate about the challenges for the future. We will consolidate and publish existing research in these areas. We will also commission a number of think pieces from education writers and commentators to stimulate wider discussion.

We will involve a range of curriculum experts, thinkers and drivers in a series of summits to consider the forces for change and their implications for learning.

We will use the outcome of this work to support and inform curriculum modernisation. It will also provide a backdrop for the implementation of specific reforms, ensuring that work on innovation and personalisation is well matched to the broader aims of education.

Meet the challenge

Please visit our web pages at www.qca.org.uk/futures/. These will include our think pieces and provide a focal point for engaging with a wider audience.

Contact us directly at futures@qca.org.uk

'All education springs from
images of the future and all
education creates images of
the future.'

ALVIN TOFFLER, LEARNING FOR TOMORROW



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