futurelab
innovation in education

Curriculum and teaching innovation
Transforming classroom practice and personalisation

a Futurelab handbook

KEY TO THEMES OVERLEAF

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Key to themes

Futurelab understands that you may have specific areas of interest and so, in order to help you to determine the relevance of each project or publication to you, we have developed a series of themes (illustrated by icons). These themes are not intended to cover every aspect of innovation and education and, as such, you should not base your decision on whether or not to read this publication on the themes alone. The themes that relate to this publication appear on the front cover, overleaf, but a key to all of the current themes that we are using can be found below:

Digital Inclusion – How the design and use of digital technologies can promote educational equality

Innovative Teaching – Innovative practices and resources that enhance learning and teaching

Learning Spaces – Creating transformed physical and virtual environments

Mobile Learning – Learning on the move, with or without handheld technology

Learner Voice – Listening and acting upon the voices of learners

Games and Learning – Using games for learning, with or without gaming technology

Informal Learning – Learning that occurs when, how and where the learner chooses, supported by digital technologies

Learning in Families – Children, parents and the extended family learning with and from one another

For more information on our themes please go to **www.futurelab.org.uk/themes**

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Ben Williamson and Sarah Payton
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1. INTRODUCTION

The audience

This handbook is intended to provide guidance for educators interested in exploring the potential of personalisation to transform curriculum design and teaching practices. It is aimed primarily at educational leaders involved in curriculum and teaching innovation. This includes headteachers of primary and secondary schools, curriculum managers responding to recent changes to the National Curriculum, classroom teachers responsible for developing new practices, and local authorities. It should also be relevant to teacher training agencies and departments, and to trainees preparing to enter the teaching workforce. It responds to some recent educational policies (for example, the new Key Stage 3 National Curriculum introduced in 2008), and anticipates others (reform of the Key Stage 4 National Curriculum and the recommendations of the Rose Review of the primary curriculum), and relates to the conclusions of a House of Commons inquiry into the National Curriculum produced in 2009.

The handbook is not a step-by-step guide to 'doing' innovation in school, nor a set of classroom resources. It should be used for schools to devise aims and objectives for curriculum and teaching innovations, and to inform the decision-making process during long-term curriculum planning. It can be read and used by all educators interested in educational change, and it aims to draw together key considerations from a range of curriculum and teaching initiatives from across the UK[1]. It is hoped that as more and more schools begin to innovate with their curriculum, and to innovate with teaching and learning, that a rich body of evidence and case studies will emerge that can be shared in an ethos of collaborative collegiality. It is hoped this handbook can contribute to the momentum for exciting, challenging and transformational change in schools.

Why curriculum innovation?

What's a curriculum for?
A school curriculum is intended to provide children and young people with the knowledge and skills required to lead successful lives. Today, there is growing concern that the taught curriculum needs to be reconsidered and redesigned. This is reflected in a House of Commons inquiry into the National Curriculum which has concluded that it is too prescribed, incoherently arranged, and overloaded with content.

The use of the word 'innovation' in discussions about the school curriculum and classroom teaching practice has become widespread. It is the keyword in much policymaking across all public services. 'Personalisation', too, has become an organising concept for the curriculum[2].

What is a curriculum for at this time? It comprises a challenging selection of subjects that help children and young people understand the world. It highlights skills necessary for learning throughout life, as well as for work, and for one's personal development and well-being. But a curriculum is also political. Decisions about 'what's in' and 'what's out' change from time to time depending on political needs and aspirations. A curriculum fundamentally establishes a vision of the kind of society we want in the future, and the kind of people we want in it: it decides what the 'good life' is for individuals and for society as a whole. As such, it's not always possible for everyone to agree on what a curriculum should be. It could be said that the most significant curriculum innovation in recent English history was the establishment of the National Curriculum in 1988, a political decision that still sustains understandable debate and argument today[3].

This handbook is intended to clarify what is meant by 'curriculum innovation' and 'innovation in teaching and learning' at a time when that National Curriculum is under reform, and schools are being told to be more locally creative and innovative. It is about school change in terms of what is taught, and how it is taught. Simply put, we view the school curriculum as a site for exciting new and innovative classroom approaches. The handbook shows why this may be needed, and outlines what it might mean in practice.

1. A useful source for locating information on related initiatives is through the 'open source' partnership involving Futurelab alongside many other major educational organisations: **www.thersa.org/projects/education/education-campaign/partner-organisations**
2. Futurelab has previously produced a report on personalisation: Green, H, Facer, K, Dillon, P & Humphries, P (2005) Personalisation and Digital Technologies (Futurelab), available at: **www.futurelab.org.uk/personalisation**
3. Excellent discussion of curriculum debates is supplied in White, J (ed) (2004) Rethinking the School Curriculum: Values, aims and purposes (RoutledgeFalmer)

What's happening to the curriculum?

There are already some shifts underway in current educational thinking and policymaking which will contribute to innovations in the curriculum and teaching practice.

The introduction of the new National Curriculum for secondary schools (phased from 2008-2011) has brought school leaders and classroom teachers more opportunities to design a curriculum that is relevant and appropriate to the needs of the children in their care. Streamlined in content and reorganised around the three aims of enabling all children to become successful learners, confident individuals and responsible citizens, the new National Curriculum has the potential to rejuvenate subjects, to enhance interdisciplinarity, and to create meaningful and sustainable connections with the 'real world' that children experience outside school. Likewise, new 14-19 diplomas are intended to link academic and vocational knowledge and skills more coherently.

In addition, the Rose Review of the Primary Curriculum has indicated a heightened need for cross-curricular connections at Key Stages 1 and 2 in order for children to make links across subjects and apply knowledge and skills learnt from one area in another. It has also put more emphasis on finding constructive ways of accommodating all 13 of the primary subject areas in the limited time available. In other words, the Rose Review too is seeking innovative solutions to persisting curricular and classroom challenges.

Realising what is on offer in these policies and a range of current initiatives, however, is going to require an increased level of curricular innovation in the classroom, in school leadership, and in the decision-making of local authorities.

At a time when secondary schools are being redesigned and reconstructed through the Building Schools for the Future programme and primaries are approaching their own rebuilding schemes, it is essential that school leaders and teachers are involved in redesigning the educational experience of students too[4]. What happens in classrooms produces the architecture for any school of the future. Bricks and mortar cannot transform education.

When we refer to 'curriculum innovation' we are referring to the ways in which many factors may contribute to transformations in classroom activity. This handbook focuses on the ways in which schools can become centres of curricular innovation by responding to changing policies, engaging with research evidence, and participating in emerging and developing programmes of work. Curriculum innovation is what happens in schools when policy, research and practice are seen as a triangular framework for reconsidering and renewing curriculum design and related classroom practices.

The central argument throughout is that the design of the curriculum and the routines of the classroom are completely synergistic. To innovate in the arrangement and composition of the curriculum implies an innovation in practice.

The handbook also explores questions about what it means to be a teacher at a time when the curriculum is up for change, and about what is meant by 'childhood' when children's lives are more and more diverse. These are important considerations if curriculum innovation is a process involving both teachers and children, as we argue it should be. They are important considerations, too, for defining the aims of any educational innovation when the influences on the work of schools are proliferating to include businesses, pressure groups, think-tanks, charities, and third sector organisations[5].

Although curriculum innovation can originate in and belong to schools, as this handbook will show, it now involves many other diverse parties and interests too. As such, curriculum innovation may take many forms, informed by many different factors and special interests.

4. For more discussion of the symmetries between BSF and educational 'transformation' see Futurelab (2008) Transforming Schools for the Future? A collection of provocation papers (Futurelab and Toshiba)

5. For example, the computing corporation Cisco produces reports on the future of schools, Microsoft has a global Partners in Learning initiative, think-tank Demos regularly publishes on education, the Royal Society of Arts and Manufacturing runs successful education initiatives, and Futurelab devises and researches many different innovations in schools

Aims and outline of this handbook

It is our aim to supply a critical but practical overview of the drivers and factors influencing curricular innovation. We look at the most recent policy shifts, and identify how these situate the work of schools in larger debates about equipping British people for changing economic circumstances and conditions. The development of 'world class skills', twinned with the contemporary focus on ICT, and on heightening employability for a competitive economy, are all parts of the modern educational policy discourse: ways of thinking, writing, and talking about the status and role of education as we look to the immediate future. We examine how the policies scripted as part of the rubric of these changing times correlate with ideas about curricular innovation.

In subsequent sections we then explore the major research drivers for curricular innovation. Particular attention is given to the emergence of concepts such as 'personalisation' and 'personalised learning', 'media literacy', 'student voice' and 'active participation'. These concepts imply a shift in how childhood is perceived and written about in education. The idea of the schoolchild as a passive recipient of school knowledge is increasingly being rejected in favour of a view of children as socially active and participative, democratically bringing existing knowledge and ideas into the classroom that are worthy of consideration in the curriculum. This view, though becoming more and more popular, is far from a dominant framework in schools. We aim to consider its potential impact, and throughout a series of case studies and examples concentrate our attention on examples of research and practice that have put children's new needs and entitlements at the heart of the educational experience. What does it mean for schools and for classroom practice if they are democratised to permit students to make more decisions about the content, processes and outcomes of their learning? We ask what might make a 'good teacher' in this context.

Analysing the relevant policy and research side by side allows us to derive some common principles and frameworks for curricular innovation. Throughout, we identify existing examples and case studies of curricular innovations. We have no intention of evaluating or assessing the effectiveness of these initiatives; we are more absorbed by their common features, and by how they relay educational policy and research theory to actual classroom practice.

It should be noted that we have not attempted to replicate other recent work on education reform and school change. A report by the Institute of Public Policy Research (ippr), for example, provides detailed policy recommendations for educational reforms that are outside the scope of this document[6]. A comprehensive literature review of the research on school change commissioned by Creative Partnerships provides a systematic examination of the evidence, which, as the boxed text below shows, reminds us that any kind of educational change is challenging, messy, and slow[7].

School change is a complex and somewhat unstable notion. There are debates about what it is, why it might be done, and how it is effected.

However, there is widespread agreement that:

_ there is no single recipe for change

_ it requires action at the local level, but also support from outside

_ it takes time, usually longer than anticipated.

Change has been notoriously hard to sustain, and even where there have been some gains in learning outcomes, these plateau after a relatively short period of time.

This presents an ongoing challenge to schools and school systems, as well as to those who seek to support and better understand the purposes and practices of change.

From Thomson, P (2007) Whole School Change[7]

With these challenges in mind, our intention is to provide an accessible handbook that can guide school teachers and school leaders in their thinking about the curriculum and classroom practice.

6. Sodha, S and Margo, J (2008) Thursday's Child (ippr)
7. Thomson, P (2008) Whole School Change: A review of the literature (Creative Partnerships)

2. CURRICULUM INNOVATION AND EDUCATION POLICY

Since New Labour came to power in 1997 there has been a relentless production of educational policies, documents and texts. Clearly, Tony Blair's mantra of "education, education, education" continues to resonate. What, though, are the emphases in these documents, and what are the implications for curricular innovation? In the 2008 'Innovation Nation' report prepared by the Department of Innovation, Universities and Skills, it is argued that the UK needs to become more innovative in order to prosper, and that education is key to this transformation; indeed, it claims children need to develop a more enterprising and innovative mindset. The language of innovation has, then, become increasingly powerful in educational policy. It is used in three closely interrelated ways:

_ innovation as a curriculum design process by education leaders

_ innovation as professional classroom practice by teachers

_ innovation as a mindset and skill to be adopted by children.

This section summarises the key emerging policy orientations, and discusses their implications for curriculum innovation and innovation in teaching practice. It is important to understand these policy debates because they will, if only indirectly, impact on what happens in schools. Schools are not isolated institutions, but related in subtle and complex ways to society. Just as a government works by establishing a future vision of society and the people it wants in it, schools are involved in helping to construct that society through educating young people to participate in it.

Innovation Nation

The white paper 'Innovation Nation' prepared by the Department of Innovation, Universities and Skills in 2008 sets out a blueprint for the United Kingdom as the most innovative country in the world. Innovation, it claims, is essential to the UK's economic prosperity and quality of life. As such, innovative solutions are to be fostered in government, business and public services. "Innovation in public services will be essential to the UK's ability to meet the economic and social challenges of the 21st century," the paper argues:

"Education, law, health and transport provide the underpinnings for all innovative activity. They must be delivered efficiently and imaginatively to take account of increased and more complex demands from public service users... Those responsible for public service delivery must also learn the lessons of open innovation and adopt innovative solutions from the private and third sectors."[8]

The white paper suggests that public services such as education must adopt innovation at all levels, ensuring that efficient and imaginative models of innovation already developed in the private sector are recruited to the best possible purposes. These statements are in line with the need for innovative professional approaches to educational issues.

In state education specifically the implication is that schools need to foster in children the new capacities of innovative thinking, to enhance the development of children's skills in the core areas of science, technology, engineering and maths (STEM subjects), and to support the take-up of new qualifications such as 14-19 diplomas. This is in line with the third definition of innovation as a mindset for children to adopt. The paper explains:

"The work of DCSF is contributing to the development of an enterprising and innovative mindset in young people... to ensure that young people are equipped with the skills and knowledge they need, including enterprise and innovation skills, for personal and professional success in the modern world."

The focus of this white paper has obvious potential ramifications for curriculum design, with a heightened emphasis on ensuring the development of the necessary skills for children to become innovative and enterprising future workers, as well as on teachers to become innovative professionals. It also demonstrates a commitment to seeing teachers as innovators, professionals with the imagination to devise schemes that can transform education.

8. Department of Innovation, Universities and Skills [DIUS] (2008) Innovation Nation (The Stationery Office)

Public service reform

Educational policy reflects the Government's wider commitments to the reform of public services in England and Wales, and the vision of "world class public services" it aims to achieve. As set out in the 2008 Cabinet Office document 'Excellence and Fairness', reforming public services is concentrated on giving citizens and users of public services more choice and responsibility, so that they are "available when they need them and tailored to meet their individual circumstances"[9].

This model of "citizen empowerment" aims to see more people taking responsibility for the governance of public services, and provides a "greater say for frontline staff". It is also premised on a notion of "new professionalism" where public service professionals are encouraged to find creative ways of delivering services that are responsive to citizens' and users' personal and individual needs, and is linked to "strategic leadership".

In educational terms, what this implies is a greater strengthening of the partnership bonds between schools and families, with teaching professionals communicating with parents and their children, and parents and children in turn communicating to schools how educational services can best meet their needs. Citizen empowerment and new professionalism are therefore national policy designs for public service reform that impact on attempts to innovate in the curriculum.

Every Child Matters and The Children's Plan

Every Child Matters is the key plank in British Government policy for children's services[10]. It seeks to join up all children's services to ensure that the education, health and care of children is smoothly managed across all services. The Government's objective is for every child, whatever their background or their circumstances, to have the support they need to:

_ be healthy

_ stay safe

_ enjoy and achieve

_ make a positive contribution

_ achieve economic well-being.

These aims, strengthened by public service reform strategies, underpin the approach taken in the new National Curriculum.

The Children's Plan, launched late in 2007, seeks to establish the UK as the best place in the world for children and young people to grow up. The plan puts many of the objectives of Every Child Matters into practice. It is based on five principles:

_ government does not bring up children - parents do - so government needs to do more to back parents and families

_ all children have the potential to succeed and should go as far as their talents can take them

_ children and young people need to enjoy their childhood as well as grow up prepared for adult life

_ services need to be shaped by and responsive to children, young people and families, not designed around professional boundaries

_ it is always better to prevent failure than tackle a crisis later[11].

Together, Every Child Matters and The Children's Plan propose a new emphasis on the role of government to support children, schools and families through schools as well as through other public services. The introduction of a new National Curriculum for Key Stage 3 in 2008, followed by new curricula for Key Stage 4 starting in 2010, and a comprehensive review of primary education all attest to the influence of the new agenda in children's services reform.

9. Cabinet Office (2008) Excellence and Fairness: Achieving world class public services (HMSO).
Available online: **www.cabinetoffice.gov.uk/media/cabinetoffice/strategy/assets/publications/world_class_public_services.pdf**
10. Every Child Matters website: **www.everychildmatters.gov.uk**
11. DCSF (2007) The Children's Plan: Building brighter futures.
Available online: **www.dcsf.gov.uk/childrensplan/downloads/The_Childrens_Plan.pdf**

11–14 curriculum

Introduced at Key Stage 3 from September 2008, the new National Curriculum is embedded in notions of citizen empowerment and new professionalism. It attempts to delegate more responsibility for shaping activities in classrooms to teachers by streamlining much of the curricular content and syllabi to be covered in subjects. It provides the 'strategic leadership' which supports and incentivises schools and teachers to enable change without micro-managing their everyday processes, in other words, greater freedom to innovate in their practices.

The new National Curriculum for England is focused through the aims of supporting children to be successful learners, confident individuals, and responsible citizens; it provides a model of how these aims can be achieved through subjects as well as through cross-cutting themes and non-curricular activities. By granting greater 'personalisation' to schools it is intended to allow teachers to 'tailor' their practices to the needs of children more effectively and coherently[12].

Additionally, the new curriculum puts greater emphasis on developing children's personal, learning and thinking skills (PLTS). These are seen as sets of core capacities and capabilities that children will need to develop to equip them for the world of work and citizenship beyond school. While subject expertise therefore remains of central importance to the curriculum, there has been more acknowledgement that this content knowledge must be supplemented with other competences. The PLTS framework is organised around six key areas:

_ independent enquiry

_ creative thinking

_ reflective learning

_ team work

_ self-management

_ effective participation[13].

In Scotland, similar approaches underpin the recent development of the Curriculum for Excellence, which is organised around the four aims of enabling children to become successful learners, confident individuals, responsible citizens and effective contributors[14].

The PLTS framework, Every Child Matters, and Curriculum for Excellence objectives all reflect a perceived need to reorient the work of schools toward skills acquisition. This goes beyond the acquisition of functional skills. The emphasis on independent enquiry, creative thinking, reflective learning, team work, self-management, and effective participation is all part of the new language of '21st century skills'. These skills are deemed to be essential for children's future productivity, prosperity and well-being in a changing world. Schools are positioned at the forefront in preparing children for the new challenges of this century.

12. National Curriculum homepage: **curriculum.qca.org.uk**

13. More detail on PLTS: **curriculum.qca.org.uk/key-stages-3-and-4/skills/plts/index.aspx?return=/key-stages-3-and-4/skills/index.aspx**

14. Curriculum for Excellence homepage: **www.ltscotland.org.uk/curriculumforexcellence**

Rose Review of the primary curriculum

The most comprehensive government review of the primary curriculum in many years, the Rose Review has sought to re-emphasise the need for greater coherence between subjects for 4-11 year-olds. It aims to provide a more flexible, less prescriptive curricular structure than currently exists, which will enable primary schools to:

_ teach worthwhile knowledge and skills directly, and develop children's understanding of the key ideas that define the principal subjects

_ provide ample opportunities for children to apply and use their knowledge and skills in cross-curricular studies to increase their understanding and capability

_ develop good attitudes and dispositions so that children are instilled with a love of learning and a desire to go on learning

_ promote creativity, and enable children to achieve a depth of study that is attuned to their different but developing abilities.

Taking as one major focus area the need for innovative solutions to the problem of accommodating 13 subject areas in the primary curriculum, it has recommended organising the curriculum according to six overarching themes:

_ understanding English, communication and languages

_ mathematical understanding

_ scientific and technological understanding

_ human, social and environmental understanding

_ understanding physical health and well-being

_ understanding the arts and design[15].

This does not entail arranging primary teaching and learning through topics or cross-curricular themes. In practice it will provide a framework to enable teachers to make sense of how the separate subject areas can complement one another, and for children to make worthwhile cross-curricular links across them. The six themes are intended to provide greater cogency for teachers in designing their own approaches to the curriculum.

At the same time as the Rose Review, an independent primary review by Cambridge University has generated an alternative curricular framework, as the boxed text shows[16].

Cambridge Primary Review: 12 aims for primary education in three groups

_ The needs and capacities of the individual – wellbeing – engagement – empowerment – autonomy

_ The individual in relation to others and the wider world – encouraging respect and reciprocity – promoting interdependence and sustainability – empowering local, national and global citizenship – celebrating culture and community

_ Learning, knowing and doing – knowing, understanding, exploring and making sense – fostering skill – exciting the imagination – enacting dialogue

15. Rose Review website: **www.dcsf.gov.uk/primarycurriculumreview**

16. Cambridge primary Review website: **www.primaryreview.org.uk/Publications/CambridgePrimaryReviewrep.html**

The Gilbert Review, which also reported in 2006, set out a vision of teaching and learning in 2020. It highlights:

_ being able to communicate orally at a high level

_ reliability, punctuality and perseverance

_ knowing how to work with others in a team

_ knowing how to evaluate information critically

_ taking responsibility for, and being able to manage, one's own learning and developing the habits of effective learning

_ knowing how to work independently without close supervision

_ being confident and able to investigate problems and find solutions

_ being resilient in the face of difficulties

_ being creative, inventive, enterprising and entrepreneurial[18].

The following excerpt from the Gilbert Review provides a clear blueprint for the kind of innovative teaching and learning envisioned by current policy:

"Close attention is paid to learners' knowledge, skills, understanding and attitudes. Learning is connected to what they already know (including from outside the classroom). Teaching enthuses pupils and engages their interest in learning: it identifies, explores and corrects misconceptions. Learners are active and curious: they create their own hypotheses, ask their own questions, coach one another, set goals for themselves, monitor their progress and experiment with ideas for taking risks..."

These 'soft skills' underpin much contemporary educational policymaking. They are skills which equip people to be flexible and adaptable in changing and uncertain conditions.

Skills

The publication of the Leitch Review of Skills in 2006 stated that the UK needs to enhance in its workforce 'world class skills' for 21st century competitiveness. The report is based on an analysis of the global economy and on the perceived strength of the British economy and workforce to maintain and grow the nation's productivity, especially in newly emerging areas. The skills it highlights include those of leadership, management and innovation, which it sees as essential to future growth, but also include basic functional skills. It is important to note that the Leitch Review does not place the onus wholly on schools: it demonstrates how adults will need constant re-equipping with skills in an uncertain and unpredictable working environment[17].

17. Leitch (2006) Prosperity For All in the Global Economy – World Class Skills (HMSO).
Available online: **www.hm-treasury.gov.uk/d/leitch_finalreport051206.pdf**
18. Gilbert (2006) 2020 Vision: Report of the teaching and learning in 2020 review group (DfES Publications)

Harnessing Technology

The focus on skills in the Leitch Review accommodates the capacities associated with ICT use. The new economic, social and citizenship conditions to which much educational policy is oriented are rooted in the transformational potential of new technologies and media.

The Government's Harnessing Technology Strategy prepared by Becta (British Educational and Communications Technology Agency) in 2008 emphasises the use of ICT for transforming learning. The strategy aims to create an "e-confident" system that is "intelligent and agile" where:

_ learners access learning resources and support at any time and from anywhere

_ technology-supported learning helps build higher order skills

_ technology helps deliver more personalised services for learners

_ all learners gain value including disadvantaged and vulnerable groups[19].

The strategy stresses the place of ICT as a core tool in a modern education and skills system, with the capacity to link schools with learners' homes, to enhance personalised learning, and to contribute to flexible skills development. ICT is seen as providing the tools for both innovative professional practice in the classroom and to enhance children's innovative mindsets.

Personalisation

Throughout current educational policymaking the dominant motif is of 'personalisation' and 'personalised learning'. Personalisation describes a system in which education is tailored to fit each individual. The DCSF publication 'Personalised Learning - A Practical Guide' produced in 2008 defines personalisation as:

> "...taking a highly structured and responsive approach to each child's and young person's learning, in order that all are able to progress, achieve and participate. It means strengthening the link between learning and teaching by engaging pupils - and their parents - as partners in learning."[20]

In terms of curriculum innovation, it suggests building "flexibility into curriculum organisation and delivery to ensure greater coherence from the pupils' perspective". The document provides a personalisation framework based on nine targeted areas for school improvement, as the boxed text on the next page shows.

The DCSF vision of '21st century schools' is based on such a model of personalisation, where the system will be characterised by a diverse and highly expert workforce of skilled professionals with great leadership; and a shared determination to do the best for every child. It will do this by:

_ maintaining high aspirations for all children and young people and providing excellent personalised education and development to ensure that all are able to progress and reach high standards

_ enabling schools to play a key role in identifying and helping to address additional needs, working at the centre of a system of early intervention and targeted support

_ providing a range of activities and opportunities to enrich the lives of children, families and the wider community; and contributing to community objectives such as local cohesion, sustainability and regeneration.

Personalisation is therefore an encompassing framework for education policy, and central to a vision for the reform of the school system.

19. Becta (2008) Harnessing Technology: Next Generation Learning 2008-14 (Becta)
20. DCSF (2008) Personalised Learning - A Practical Guide (DCSF)

Implications of educational policy for curricular innovation

Innovative approaches to the curriculum at the present time have shifted some of the stress from subject knowledge to the acquisition of '21st century skills' and 'personalisation' which are seen as essential both for individuals' personal successes in learning and adult life, and for national economic development[21].

Whatever changes to the curriculum government policy advises, it is certainly unlikely to challenge the status of subjects. School subjects are, of course, powerful arrangements of knowledge, access to which allows people to make sense of the world around them, and to share a common cultural heritage. Without school subjects, children's access to the sources of powerful knowledge that are needed to make sense of the world is proscribed. The emerging emphasis on ensuring coherence between subjects, however, suggests a recognition that a heavily prescriptive subject curriculum is not always effective for all young people. Subjects, too, may need reconsidering in this light.

The job of disentangling 'curriculum innovation' therefore means paying special attention to the construction of school subjects as well as the construction of new skills frameworks, the emergence of new political drivers and imperatives, and the proliferation of new influences and sources of 'expertise' or 'evidence' about 'what works' in the educational sphere. What actually occurs in the classroom depends to more or less extent on how teachers' work is positioned in relation to all these factors.

The House of Commons Children, Schools and Families inquiry into the National Curriculum has, for example, concluded that teachers have been "de-skilled" by a "franchise" model of schooling, and argues for more professional freedoms for them[21].

Education policy provides a useful way of contextualising the work of schools, though it is not always the most compelling. The next section of this handbook provides a discussion of the wider debates associated with contemporary attempts to innovate in the curriculum and classroom teaching practice.

DCSF personalisation targets

High quality teaching and learning
_ designing highly focused teaching sequence/lesson plans with high demands of pupil engagement

_ supporting pupil independence in their learning

Target setting and tracking
_ using progress data to identify individuals and groups who are off trajectory

_ adjusting teaching and intervention programmes in the light of tracking information

Focused assessment
_ incorporating learning objectives, learning outcomes and success criteria into day-to-day practice

_ supporting pupils in assessing and evaluating their learning through peer and self-assessment

Intervention
_ linking learning developed in intervention programmes into mainstream lessons

Pupil grouping
_ evaluating the impact of class/teaching groupings (sets, bands, mixed ability, gender)

The learning environment
_ adapting the organisation of the classroom/ learning environment to the pupils' learning needs

Curriculum organisation
_ choosing an overall curriculum model/ structure that caters for the needs of all pupils

_ incorporating flexibility into curriculum organisation and delivery to ensure greater coherence from the pupils' perspectives

The extended curriculum
_ offering a full range of 'out of hours' activities which enhance and extend the basic curriculum

_ involving parents/carers as well as the wider community in extended provision

Supporting children's wider needs
_ maintaining close communication with parents/carers

_ developing multi-agency links and active partnerships

21. Children, Schools and Families Committee (2009) National Curriculum, Vol 1 (The Stationery Office) For an alternative education policy vision from the Conservative Party, see Conservative Party (2008) Building Skills, Transforming Lives. Policy Green paper No 7 (Conservative Party)

Discussion: Policy to practice

Reading through the various policy documents identified in this section, think about these questions:

_ What do you think government is trying to achieve in education? How does this contribute to wider political or economic needs? What is the future vision for society implied by these documents, and what sorts of people will that kind of society need?

_ How does government policy fit with your own experiences as a teacher or as someone who works within the education system?

_ Thinking about particular children or families you know professionally, how might they be affected by the changes being recommended in government policy?

_ What is likely to be the impact of new educational policies and reforms on teachers' work?

_ What do you think 'personalisation' might mean for you in the classroom?

EXAMPLE: STAKEHOLDER ENGAGEMENT

Co-operative trust schools[22]
A co-operative trust school is a foundation school in which stakeholders including pupils, parents, staff and others from the wider community are encouraged to become members with a say in running of the school, its policies and curriculum. The ethos of the trust and therefore the school is rooted in the faith neutral values of The Co-operative Group: working together for mutual benefit, responsibility for your own actions, democracy (one member, one vote), equality, equity and solidarity.

As part of the Government's drive to increase parental engagement in schools and to support their vision of the 21st century school being the heart of the community, in September 2008 Ed Balls MP, Secretary of State for Children, Schools and Families announced an initiative to support the setting up of 100 co-operative trust schools over a period of two years.

Sutherland Business and Enterprise College in Telford became a Specialist Business and EnterpriseCollege in 2007, with Midcounties Co-operative Society as its main sponsor. It is an active participant in the network of co-operative Business and Enterprise Colleges. Headteacher Steve Wall is hoping to engage at least eight schools in a cluster to become involved in a co-operative trust which he feels will embed the values driven approach and improve on the way they work.

www.beecoop.co.uk/cms/sites/trusts. beecoop.co.uk/files/sutherland.pdf

Campsmount Technology College and the Community Partnership Trust are forming a co-operative trust with Doncaster College, the Co-operative College, North Doncaster Rural Trust and Leeds Metropolitan University. The trust will have clear aims of "raising community aspirations through valuing education and training, embedding a lifelong learning ethos and actively promoting regeneration in the community". The trust will adopt the values and principles of the co-operative movement and will provide a voice for all members of the community, especially parents and carers of young people.

www.beecoop.co.uk/cms/sites/trusts. beecoop.co.uk/files/campsmount.pdf

The over-arching aim of a co-operative trust school is to ensure that its students are equipped with skills essential in a global 21st century society. The Co-operative Group sees parental engagement as one of the single most important features in raising expectations and achievement. The ethical trust school model provides a way for young people to learn about active citizenship by participating in a major co-operative and the running of their school.

The Co-operative Group has a long history of working in education, one of its principles being "education, training and information – co-operatives educate and develop their members as well as their staff". It believes the future requires greater collaboration between schools, colleges, universities, businesses and local communities, and see co-operative trust schools as a way of developing long-term relationships with educators.

It has already developed a network of Co-operative sponsored schools that have been designated as Business and Enterprise colleges within the Government's specialist school status strategy. This has provided the sponsored schools with the opportunity to explore co-operative enterprise and to use the global co-operative sector as a learning resource with which to enrich the curriculum. It is anticipated that some of these schools might wish to become co-operative trust schools.

22. The Co-operative Group: **www.co-operative.coop**, Co-operative Trust Schools: **trusts.beecoop.co.uk**,
The Network of Co-operative Business & Enterprise Colleges: **www.becolleges.coop**

3. CURRICULUM INNOVATION DEBATES

In this section we map out some of the dominant arguments and debates emerging from research and academic writing that contribute to our thinking around curriculum innovation. For the most part, these are composed as brief summaries of complex arguments, from which we have drawn the most salient and important points. Interested readers may wish to consult the texts detailed in the footnotes.

This discussion serves as a reminder that education is always related to wider economic and political changes. If we wish to understand what happens in schools then we should not view education as an isolated enterprise. It is an analogue of wider forces in culture, society and the economy[23]. Here we discuss those forces.

Historical dimensions of curriculum innovation

The idea of curriculum innovation is not new. Long before the establishment of a centrally prescribed National Curriculum in 1988, schools had been involved in innovating with their structures, hierarchies, and the content of their teaching.

In the 1960s and 70s, for example, some teachers recognised that the formal offer made to children through a taught curriculum of academic subjects was an insufficient incentive for many. The subjects mirrored particularly strong and powerful views of the world that were related to class, gender and ethnicity, which some young people actively resisted[24]. As a consequence, these teachers sought to engage more closely with the popular cultures, class cultures, and contextual experiences of the children in their schools. This work sought to recognise and value young people's experience, and had some influence on curriculum content and teaching practice[25].

Even earlier, however, there had already been signs of what is sometimes called a 'radical tradition' in state education. Examples from the post-war years include schools run on an ethos of no competition, no punishment, and no marking, that valued the contribution of every single member to the common good of all. This type of arrangement sees a school as a democratic and communal site, where the curriculum is co-created by teachers and students working together with sensitivity and understanding of each others' roles and responsibilities. Teachers, of course, were responsible for designing schemes of work but it could be up to students to select whatever was on offer in order to construct their own timetables and overall curriculum experience, though this always took place through dialogue with teachers.

A compelling example of a school working within such a tradition is provided in the following excerpt from a school mission statement:

> "Our system of internal government, in which every member of staff and the student body has a part that can be taken, derives from the system of learning. The more a student takes responsibility for studying, the more a student will need a voice in determining the conditions of study; the more teachers are expected to coordinate their implementation of curriculum, the more they will need to determine the organisation of the available resources and distribution of responsibilities."[26]

The current policy emphasis is on giving teachers and students more flexibility in the curriculum, particularly by celebrating the role of teachers as innovators and on developing children's innovating and creative mindsets. The impetus for such policy is largely economic, yet it suggests that there may be an opening within the curriculum for schools to develop greater systems of their own internal governance based on the principle that children and young people have things to say that are worthy of consideration in the classroom.

The radical tradition has largely disappeared over the last three decades, however, some of its key ideas and themes - such as relationships, social justice, and the co-design of the curriculum - seem to be re-emerging at the beginning of the 21st century.

23. We have adopted this view from Dale, R (1999) Specifying globalisation effects on national policy: a focus on the mechanisms, Journal of Educational Policy, 14(1): 1-18

24. Useful references for this type of analysis are Hall, S and Jefferson, T (eds) (1976) Resistance Through Rituals: Youth subcultures in post-war Britain (Hutchinson), and Aggleton, P (1987) Rebels Without a Cause? Middle class youth and the transition from school to work (Falmer Press)

25. Jones, K (2003) Education in Britain: 1944 to the present (Polity). For a practical approach to teaching through popular culture, see Marsh, J & Millard, E (2000) Literacy and Popular Culture: Using children's culture in the classroom (Paul Chapman Publishing)

26. This summary and quote comes from a useful overview of much historical and exciting current work in this tradition supplied by Fielding, M (2008) Beyond Student Voice to Democratic Community, available online: www.ioe.ac.uk/schools/efps/Beyond_Student_Voice_to_Democratic_Community.pdf

Changing times, changing schools?

A persistent view has been popularised recently amongst some educational critics that today's schools continue to operate on an outdated model of the factory floor with its associated regimes of mass production, routine labour, and strict hierarchy[27]. This image of the industrial 'factory school' is compelling, though it has never been strictly true, as some historical analysis of British state schooling demonstrates. Many teachers will attest to the effects they have felt on their profession since the first introduction of the National Curriculum in 1988, but the idea that they are little more than factory floor supervisors and that students are just robotic youths should be offensive to the profession.

But the image of the factory school is important insofar as it provides a compelling metaphor for education today. Critics of factory schooling deploy this as a metaphor because they want to replace it with a new metaphor; and the image of schools replacing that of the factory at the present time is that of the 'networked institution'. This new metaphor is equally compelling because it links schools forcefully to the digital age of computer technologies and pervasive new media. The imaginary networked school represents some major shifts in the organisation of the curriculum, leadership structures, and classroom teaching style[28].

27. This kind of argument is made by Bentley, T (1998) Learning Beyond the Classroom (Demos), and Leadbeater, C (2004) Personalisation: A new script for public services (DfES)

28. Arguments in this direction can be found in Yelland, N (2007) Shift to the Future (Routledge), and Cope, B and Kalantzis, M (eds) (2000) Multiliteracies: Literacy learning and the design of social futures (Routledge)

The figurative language of educational innovation in this context is itself predicated on the political imperative of innovation in a global society. To reiterate points made in the section on policy, in order for people to grow up to be successful workers and citizens, they need to be equipped for a globally innovative world. In order for nations to be successful economically and socially, they too need workers and citizens who can contribute to this increasingly innovative and competitive economy. People will need 'world class skills'. They will need to be more functionally literate and numerate, as well as better equipped with the soft skills to be flexible and adaptable in uncertain times.

These aims seem laudable in the face of proliferating claims about a changing world. The Institute for Public Policy Research (ippr) recommends that in order to meet these new needs there will need to be reforms in everything from teacher training and recruitment, to leadership and performance management, to curriculum design, and to assessment. The boxed text outlines the ippr recommendations.

ippr education reform recommendations

The ippr has set out a vision for a school system which emphasises a broad set of skills that are tracked over the entire school career of individual children and young people. These broad skills, alongside the core skills of numeracy and literacy and in individual subjects, include:

_ independent learning

_ self-management

_ enquiry-based learning

_ team-working

They are to be achieved through:

Effective teaching

_ attracting higher-quality candidates into the profession, especially those with previous professional experience

_ expanding initial teacher training to include training on curriculum design, assessment for learning, general skills, and age-specific child development and pedagogies

_ adopting performance management and pay structures based on capability reviews

Broadening learning: curriculum and assessment

_ framing the National Curriculum by the above broad skill set

_ allowing teachers and learners to shape what the development of these skills looks like in their schools

_ conducting a rolling review of the curriculum to ensure it remains relevant in light of changing skills and knowledge needs

_ developing models for teacher-based assessment

_ broadening the process by which teachers are held accountable beyond measures of academic attainment

Supporting learning

_ focusing on children's social and emotional well-being in the classroom, across the whole school, and through out-of-school services

_ tailoring pedagogies that are appropriate to children's development

_ taking a more flexible, theme-based approach, where appropriate

_ piloting alternative structures such as middle school learning communities at Key Stage 3 and educative play in primary school

Reforms to the structure of the school year

_ moving towards a nationally set, standard school year with a more even spread of time in school throughout the year

The names given to these ostensibly new conditions include 'the knowledge economy', 'post-industrial society', 'the weightless economy', 'the information age', 'post-Fordism', 'the competitive economy', and 'the networked age', as well as many others[29]. The idea is that "wealth production comes from ideas, knowledge, skills, talent and creativity" rather than from physical effort[30]. The new learners and workers able to thrive in such an environment must be "shape-shifting portfolio people" able to change to meet emerging needs[31]. The work of schools, and the curricula they support through crafted teaching, is therefore being rescripted to meet these changing conditions, to better prepare children for a world much different to the one reflected in the old National Curriculum.

The basic argument is the same - that ways of working, policymaking, and the social and economic apparatuses that allow people and nations to be successful need to be reformed for changing times - and it is repeated around the world. It has been shown, for example, that educational policy documents in nations as diverse as Britain, Pakistan, New Zealand, Bangladesh and Singapore all share similar aims. The World Bank's Education for the Knowledge Economy Programme provides assistance for developing nations to "equip themselves with the highly skilled and flexible human capital needed to compete effectively in today's dynamic global markets"[32].

Curriculum and teaching innovation in the UK is part of that global continuum. It aims to make British children uniquely enabled to thrive in a changing world, as future competitive workers and as participative citizens.

The globalisation of educational policymaking, which seeks to produce the world class skills to allow workers to be competitive in a landscape of mobile and flexible labour, should also serve as a reminder about the uniqueness of every school. The policies seem to be global; locally, however, they exert different effects. A delegation of curriculum design to schools by government recognises that individually they have very different needs.

The new frameworks for skills and new curricular aims reinforce the need for innovative approaches to education that can contribute to British social and economic renewal. They also provide schools, headteachers and classroom professionals with greater responsibility for defining how they achieve those aims.

Taken as a whole, the work of schools in this emerging context can be seen as having global, national and local dimensions that serve to reinforce and ramify each other, as the table below indicates.

GLOBAL ⟷	NATIONAL ⟷	LOCAL
Knowledge economy World class skills Flexible human capital	The National Curriculum Every Child Matters The Children's Plan	Personalisation Citizen empowerment New professionalism

29. For a detailed and critical discussion, see Webster, F (2006) Theories of the Information Society, third edition (Routledge)

30. See Leadbeater, C (1999) Living on Thin Air (Viking): 18

31. Gee, JP (2005) Situated Language and Learning: A critique of traditional schooling (Routledge): 90

32. Ball, S (2008) The Education Debate (Policy Press): 20

An educational-industrial complex?

The role of school curricula and teacher professionalism in a context of globalised economic forces has invited significant scholarly criticism. There are concerns from some critics who view contemporary changes in the structures, routines and emphases in schools as proof of the emergence of an "educational-industrial complex"[33].

What this means is that what goes on in schools is not just influenced by policy, research and practice, but by the interests of businesses, pressure groups, think-tanks and so on. Particularly due to the pervasiveness of new technology and media, it is those organisations in this 'innovations' sector which secure most influence. Notably, it is sometimes claimed that the purpose of schools has been turned to securing economic well-being above all else, and that this is favourable to the interests of these large corporations.

Educational policy is seen to favour these organisations because without a suitable pool of highly skilled labour they may switch production to other locations. This political tension clearly has knock-on effects in the classroom, with teachers urged to provide locally innovative solutions to global needs[34].

The movement of educational change is therefore, arguably, away from centralised state control and decentred to include economic, political, and corporate interests. Such de-centrism does not simply devolve decision-making to localities but to organisations with a global reach. The influence of the market on children and schools - including everything from vending machine suppliers to corporate ICT providers - is already the subject of a Government-commissioned review[35].

The school/corporate connection needs to be recognised in curricular innovation, not least because much of what is now considered 'innovative' is said to involve new technology and media, and because it is these very new technologies and media that are supposed to supply both educational renewal and economic progress for the state. Indeed, it might be claimed that the paradigm of innovation employed in both policy and commercial texts is guided by a techno-deterministic view of society where economic progress and society itself are seen to be shaped by technological advance[36].

More and more companies such as Microsoft, AOL, Apple, Cisco and so on are becoming involved in schools through sponsored programmes and materials. Often, these interventions are specifically badged as 'innovations'. Microsoft, for example, runs an 'innovative teacher' competition, hosts networks of innovative practitioners, and partnered with Futurelab on a curriculum project called Enquiring Minds[37]. The US-based Partnership for 21st Century Skills (which is supported by many major multinational new technology and media organisations) lists a series of 'Learning and Innovation Skills' that are common in the corporate educational literature (see boxed text for details). These reinforce a renewed notion of schools as producing innovative and flexible learners and future workers able to think creatively, solve problems, and develop their own personal portfolio[38].

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33. The term 'educational-industrial complex' can be found in Brightman, H and Gutmore, D (2002) The educational-industrial complex, The Educational Forum, 66(4): 302-308. The authors use the term to describe the increasing role of private sector corporations and businesses in state education, and ask who benefits most from it. It is derived from the term 'military-industrial complex' which refers to the close relationship between the 'war-room' in the military and the 'boardroom' in the arms and technology industries

34. For an overview of such arguments, see Kelly, A (2009) Globalisation and education: a review of conflicting perspectives and their effect on policy and professional practice in the UK, Globalisation, Societies and Education, 7(1), 51-68

35. David Buckingham's assessment of the impact of the commercial world on children has been commissioned by the DCSF and DCMS

36. This is the argument of Bullen, E, Fahey, J and Kenway, J (2006) The knowledge economy and innovation: certain uncertainty and the risk economy, Discourse, 27(1): 53-68

37. For details on the Enquiring Minds programme, see: **www.enquiringminds.org.uk**. Though funded by Microsoft, the project is not focused on technology, but on heightening young people's ability to make decisions about the content, processes and outcomes of their learning. It views children as active in their own lives, and seeks to connect their experiences more closely with the taught curriculum

38. Partnership for 21st Century Skills website: **www.21stcenturyskills.org**. A flyer detailing members of the partnership (including major new technology and media providers) is available at: **www.21stcenturyskills.org/documents/frameworkflyer_102607.pdf**

Skills framework of the Partnership for 21st Century Skills

Learning and innovation skills
Learning and innovation skills are what separate students who are prepared for increasingly complex life and work environments in the 21st century and those who are not. They include:

_ creativity and innovation

_ critical thinking and problem solving

_ communication and collaboration

Information, media and technology skills
To be effective in the 21st century, citizens and workers must be able to exhibit a range of functional and critical thinking skills, such as:

_ information literacy

_ media literacy

_ ICT (Information, Communications and Technology) literacy

Life and career skills
Today's life and work environments require far more than thinking skills and content knowledge. The ability to navigate the complex life and work environments in the globally competitive information age requires students to pay rigorous attention to developing adequate life and career skills, such as:

_ flexibility and adaptability

_ initiative and self-direction

_ social and cross-cultural skills

_ productivity and accountability

_ leadership and responsibility

There are concerns however that the commercial involvement of new technology and media companies in formal education poses a risk to the academic integrity of the taught curriculum. It constitutes a "pervasive informal curriculum" that "undermines the formal curriculum"[39]. One way of looking at this is that the informal curriculum is more relevant to the changing world children already know and for which they will need to be especially skilled to succeed in later in life.

Another way of viewing it is as a harmful influence on their intellectual development and their social experiences[40]. Perhaps more importantly, it may impact on their ability to discriminate between culturally valued knowledge and commercially produced knowledge[41], and, in the long-term it may emerge that a market-based approach to education which sees commercial organisations taking more and more of a stake in schooling will lead to new forms of inequality for children[42].

39. Molnar, A (2006) The commercial transformation of public education, Journal of Education Policy, 21(5): 621-40 (630)

40. An especially critical account is provided by Barber, B (2008) Consumed: How markets corrupt children, infantilize adults, and swallow citizens whole (WW Norton)

41. For a lively discussion of cultural and commercial knowledge see Burchall, C (2006) Knowledge Goes Pop: From conspiracy theory to gossip (Berg)

42. Discussed fully by Ball, SJ (2007) Education plc (Routledge)

Changing the subject?

It is possible to respond to the seemingly commercialised curriculum by resorting to a strongly academic regime of traditional subjects. Yet the subject disciplines are themselves highly contested. The process through which knowledge is selected for inclusion within each subject is a highly political act. "It involves competing ideological, political, and intensely personal conceptions of valuable educational activity. Furthermore, one of its primary components is the fact of influencing other people - namely students."[43]

Curriculum design can, then, be said to reflect the interests, concerns and culture of middle class teachers and students, thus potentially marginalising and downplaying the culture of working class children, or children of ethnic minority groups:

> "Too many of the things that students experience in the school curriculum do not matter in the living of one's life... The problems of living are not technical concerns of taking a means to an end. They are largely moral, cultural and value-laden."[44]

Children who do not find anything of their own worlds represented or included in the school curriculum are less likely to find it motivating, and more likely to think it is "not for me".

These kinds of tensions in the initial creation of a curriculum, and in the organisation of its subject components, are exacerbated at a time when more and more influences and pressures are being put on education systems. A curriculum is one means by which unequal power distribution in society is maintained and controlled. Indeed, it has even been called, very provocatively, a "curriculum of the dead":

> "...a curriculum which eschews relevance and the present, concentrating on the heritage and the canon based on temporal disengagement; a curriculum suspicious of the popular and the immediate, made up of echoes of past voices, the voices of a political and cultural elite; a curriculum which ignores the past of women and the working class and the colonised."[45]

As a consequence of this range of concerns about the appropriateness of the National Curriculum at a time when children need to be equipped with skills for changing times, there have been several recent attempts to innovate with curriculum structures, especially to re-engineer aspects of the curriculum around different aims, or according to themes and intended competences.

The Royal Society for the Arts and Manufacturing (RSA), for example, has compiled a 'Charter for 21st Century Learning' from a large-scale consultation with many educational organisations, experts and research institutions. Detailing what it claims to be a set of principles for a future education system, the charter emphasises the need for a complete transformation of educational goals and mindsets, with a renewed respect for teachers' creativity and innovation and a reinvigorated appreciation of the diversity of ways in which learning takes place. In particular, it stresses that both teachers and children should have greater input into the design of the curriculum, as can be seen in the boxed text on the next page[46]. The 21st Century Learning Alliance also seeks to identify examples of best innovative practice, especially in the strategic use of new technology[47].

43. Apple, M (1979) Ideology and Curriculum, third edition (Routledge)

44. McKernan, J (2007) Curriculum and Imagination: Process theory, pedagogy and action research (Routledge).
Also see Moore, A (2000) Teaching and Learning: Pedagogy, curriculum and culture (RoutledgeFalmer)

45. Ball, SJ (1994) Education Reform (Open University Press)

46. For further details on the Charter, see:
www.thersa.org/projects/education/education-campaign/education-for-the-21st-century-a-charter

47. More details about the 21st Century Learning Alliance are available at: www.21stcenturylearningalliance.com

The RSA Charter for 21st Century Education

It is the primary purpose of education to awaken a love of learning in young people, and give them the ability and desire to carry on learning throughout life.

We need to recognise that education has many aims
Education must nurture creativity and capacity for independent and critical thought.

Young people should leave formal education equipped with the confidence, aptitude and skills they need for life and for work.

Education should help young people to understand how to be happy and to develop and maintain their own emotional, physical and mental well-being.

Every young person has the right to develop to their full potential
Ability comes in many forms and learners need to be supported to enjoy success no matter where their talents lie.

The educational success of learners should not depend on their background. Schools, communities and families must work together to close gaps in attainment.

The curriculum in schools and colleges should balance abstract and practical knowledge so that every learner can access high quality academic and vocational opportunities.

Education should engage the learner with exciting, relevant content and opportunities for learning through experience and by doing.

Education must be a partnership
Learners have a valuable role to play in contributing to the design of their own learning, and in shaping the way their learning environment operates.

The education of young people should be a partnership of schools, parents and the wider community in a local area.

Schools should be inclusive, creative communities which build tolerance, respect and empathy in young people.

We must trust our schools and education professionals
Every teacher should be a creative professional involved in the design of curricula and learning environments, and should be supported and developed to fulfil that role.

Every school should be different, every school innovative and we must find ways of holding them to account for their performance that reward rather than stifle this creativity.

The RSA's own curriculum innovation project, Opening Minds, is intended to contribute to the aims of the charter through a competences and thematic framework. This means that teaching and learning occur through wide cross-curricular themes, with a focus on the development of key skills such as 'managing information', and 'team work and collaboration'.

Another independent educational charity, the Edge, has also produced a 'six steps' manifesto for educational change that further reinforces emerging messages about how to improve children's learning, including through the provision of a flexible curriculum with more weight given to skills development[48]. The boxed text details the six points of the manifesto.

48. Edge (2009) Six Steps to Change manifesto (Edge)

The Edge Six Steps to Change Manifesto

Step 1
A broad curriculum up to age 14 with opportunities to develop life skills and experience a range of future options.

Step 2
SATs replaced by an individual profile of attainment, skills and aptitudes which would be used by students, parents and teachers to choose a pathway post-14.

Step 3
At 14 all students, in addition to continuing a broad curriculum, including English, maths and science, would be supported in choosing a pathway matched to their interest and abilities, each with a different balance of theoretical and practical learning.

Step 4
Students on practical and vocational courses would be taught in specialist facilities or specialist institutions and by appropriately experienced staff.

Step 5
At 16 students would choose to specialise within their pathway, change to another pathway or enter employment with training.

Step 6
Beyond 18, students would have the opportunity to study at degree level in a centre of vocational excellence endorsed by employers.

Implications for curriculum innovation

The strict organisation of school subjects is one way of transmitting the messages of the dominant culture, and of ensuring that children have access to the really important knowledge that society has deemed the best to know. Another way of doing this would be through a curriculum of skills and competences aimed at providing the economy with suitable labour. A National Curriculum, looked at idealistically, provides a democratic entitlement for children. Skills frameworks provide children with taxonomies of skills to develop to secure their place in the economy and society.

A truly innovative curriculum would assure all children equal entitlement to this knowledge and these skills, and it would do so through an appreciation of the social, cultural and local needs of the children themselves. This undertaking would require an understanding of what childhood and growing up today is really like, and it would require a re-evaluation of teachers' professional roles. The Charter for 21st Century Education, for instance, begins to indicate some of the ways in which education could be organised differently to take account of this and to ensure teachers and children alike have some 'voice' in these matters.

There are hints in this and other documents that some key ideas from a longer tradition of radical innovation in schools are resurfacing. The primary motivations at the present time, however, are different to those that were mobilised in the past. Today, the emphasis for curriculum and classroom innovation is more firmly on preparing children and young people for a speeded-up, more uncertain era in which they will need to be equipped with the skills to be innovative thinkers in order to be successful.

Curricular debates remain contentious, ascribing current symptoms to different causes. There is no easily prescribed panacea to any single curricular ailment, nor agreement on any diagnosis. In this section we have highlighted some important themes in debates about innovating with the curriculum. In the following section, we link these major points to emerging arguments about the lives of children these days.

Activity: Curriculum and skills

Locate as many different sources as you can that describe new approaches to the design of the curriculum or which provide frameworks of skills or competences, for example, documentation from the QCA website, the RSA competences framework, the Partnership for 21st Century Skills framework, and the Edge Manifesto.

Identify the common features and the major differences between these documents, and consider these questions:

_ What is the rationale for the changes being recommended?

_ What might be the practical effects of these changes in the classroom?

_ How would changing the emphasis in schools to focus more on skills and competences change the work of teachers?

_ What are the implications for teacher professional development?

_ Which of the documents do you feel most closely meets your own beliefs about education, and about the changes that are needed to meet the needs of teachers and children?

EXAMPLE: SUBJECTS AND DISCIPLINES

Young People's Geographies[49]

The Young People's Geographies project is about making school geography more engaging and relevant to young people by involving them in the making of the curriculum and by focusing on their own 'lived geographies'.

The academic discipline of geography considers the geographies of children, youth and families, the social, spatial and environmental aspects of the lives, needs and desires of young people for example, how youth is understood and experienced in different spaces. However, this aspect of geographical study is less evident in school geography.

The Young People's Geographies project brings together students, geography teachers, academics and teacher trainers to discuss and respond to the question: "What can and should be the contribution of young peoples' geographies to the school geography curriculum?"

Funded by the DfES Action Plan for Geography and the Academy for Sustainable Communities, the project supports teachers and learners to explore ways in which students' personal geographies and the experiences that they bring with them to the classroom can be used as a starting point for the curriculum. The project also helps practitioners to access and understand the lived experiences of young people and is laying the foundations for a pedagogy based on listening.

My Place

Year 9 students from three Nottingham-based schools, Brancote Hill Sports and Community College, Arnold Hill School and Technology College, and The Nottingham Emmanuel School, worked with their teachers to co-create a series of lessons around the theme of My Place.

Students used their mobile phone cameras to photograph places around their school and their city. They then looked at the images of the various locations and considered places which made them feel comfortable and gave them a sense of belonging and places from which they felt excluded. The images were then made into collages to reflect students' feelings of inclusion. These were then displayed and used as a basis for a discussion with the schools' senior management team.

What If?

Year 10 geography GCSE pupils at Langtree School in South Oxfordshire decided in collaboration with their teacher that they would like to do a project to investigate their community's reliance on oil and gas products and the possible implications of decreasing supplies. They created the scenario of gas and oil being completely cut off in their local village and explored the impact of that over a time-span of 28 minutes, 28 days, 28 months to 28 years. Following their thinking around the impact of the scenario on themselves and their local community they began to look at possible, probable and desirable futures.

Throughout the Young People's Geographies project, conversation between teachers and learners has proved crucial to the collaborative and creative curriculum-making process. As a result the curricula that have been developed though the project have a clear sense of ownership by staff and pupils.

49. Young People's Geographies: **www.youngpeoplesgeographies.co.uk**

4. NEW MEDIA

Children and young people today are leading very different lives to the children and young people of 50 years ago, or even of ten years ago. New technology and media are a major influence on the lives of many of them, in many different ways. Arguments about the effect of these changes on children are highly polarised, and the implications for curriculum design are significant.

On one hand, there is an extremely negative view of childhood as increasingly polluted by an evil corporate marketing empire, with the implication that schools need to focus on the morals and values of a seemingly 'better' society. On the other hand is a view of childhood competence, characterised by children acquiring skills, dispositions, attitudes and modes of social interaction from the new media sphere that will be invaluable to their leisure, sociality, friendships, and even their future employability.

Following this latter argument, children are being viewed more as highly discerning, sophisticated and hard to please. This, at least, is the view associated with a good deal of marketing of children's products and services, though it is also shared by many educational thinkers.

The marketing argument is that children are not passive recipients of mass media and advertising but highly capable of making up their own minds about the media and marketing they are exposed to. In fact, children and young people are said to be so sophisticated in articulating their preferences for consumer goods that they essentially set commercial strategy, rather than consumer businesses simply selling them goods[50].

In the domain of new technology and new media this view of children and childhood takes on particular prominence because children are often perceived to be making more sophisticated use of them than their schoolteachers. The consequence is that schools do not seem able to compete with the highly immersive, persuasive and slick new media environments that children experience in their own social and leisure time[51].

Modern media organisations are acutely aware of this tension. For example, Cisco has produced a detailed report on 'The Future of School', which argues that children's social interactions and skills developed online prepare them for a world of work which schools are not equipped to provide:

> "Learner expectations are changing, bringing new habits of learning from their world of communication and collaboration - powered, in part, by emerging networks of social interaction. Employers, eager to prosper in an innovation economy, require new skills from workers, and increasingly value people who, in addition to possessing core literacy and numeracy skills, can add creativity, collaboration, problem solving, and decision making to their portfolios. Independent, life-long learning is fast becoming a prerequisite for effective skills development."[52]

While children are experiencing a highly seductive media environment outside school, in school new technology use is restricted, perhaps even considered banal by children as failing to keep up with cutting edge developments. In short, schools struggle to compete with the slick and professional presentations of the new media environment[53].

50. Detailed discussions about marketing to children can be found in Schor, J (2004) Born to Buy: The commercialized child and the new consumer culture (Scribner), and Kapur, J (2005) Coining for Capital: Movies, marketing and the transformation of childhood (Rutgers University Press). Schor's book claims there is evidence that more time spent by children on the internet or watching television heightens their materialism and worsens their relations with parents and their mental health
51. Accounts in this direction are provided by Veen, W and Vrakking, B (2006) Homo Zappiens: Growing up in a digital age (Network Continuum), and Willoughby, T and Wood, E (eds) (2008) Children's Learning in a Digital Age (Blackwell)
52. Cisco Internet Business Solutions Group (2008) The Future of School (Cisco Systems)
53. Discussed critically by Kenway, J and Bullen, E (2001) Consuming Children: Entertainment-education-advertising (Open University Press)

Cisco's report is illuminating since it suggests that an innovative approach to the curriculum and to teacher practice would be informed by developments within the new technology and media sector. It suggests that while children are seen as highly sophisticated and not easily duped in their dealings with new media, their experiences in schools are more traditional. Indeed, it is the new technology and media world which is seen as more relevant in modern society rather than the old subject curriculum and transmission pedagogies.

The major implication emerging in this area is that the curriculum needs to accommodate what is known as 'media literacy'. Media literacy teaching is intended to support children to understand how media operate: how such things as television programmes, advertisements and websites are designed, funded, and how they are received by audiences. The Office of Communications watchdog (Ofcom) defines media literacy as "the ability to access, understand, and create communications in a variety of contexts"[54].

In practice, what this means in schools and for curriculum design is that children should learn how to access and make choices about media, and that they should be supported to participate in the creation and the critical evaluation of media[55]. It means preparing children as informed participants in media culture, able to make sensible choices about what they do with media and to recognise its intended effects[56]. The boxed text provides a breakdown of the components of media literacy.

Media literacy components

1. Access
Access rests on a dynamic and social process, not a one-off act of provision. Once initial access is established, users need to alter significantly and continually the conditions of access (updating, upgrading and extending hardware and software applications). Problematically, given socio-demographic inequalities, inequalities in access to online knowledge, communication and participation will continue.

2. Analysis
People's engagement with both print and audiovisual media has been shown to rely on a range of analytic competencies. In the audiovisual domain these include an understanding of the categories, technologies, languages, representations and audiences for media. At present, not only is an account of internet-related analytic skills highly underdeveloped but the public has yet to develop such skills and so to make the most of online opportunities.

3. Evaluation
There is little point in access or analysis without judgement, but the scope and purpose of evaluation is not clear-cut: is media literacy intended to promote a democratised, diverse approach to online representations or should it underpin a more traditional, hierarchical discrimination of good from bad, authoritative from unauthorised, information and communication?

4. Content creation
Although not all definitions of media literacy include the requirement to create, it is argued first, that people attain a deeper understanding of the conventions and merits of professionally produced material if they have direct experience of content production and second, that the internet is a medium which offers previously unimagined opportunities for ordinary people to create online content. To exclude this from a definition of media literacy would be to greatly under-utilise the potential of new media for the public.

Adapted from Livingstone, S (2003) What is Media Literacy? Available online: www.lse.ac.uk/collections/media@lse/pdf/ What_is_media_literacy.doc

54. For details see: **www.ofcom.org.uk/advice/media_literacy**

55. For a discussion of media literacy see Livingstone, S (2008) Media literacy: why is it on the policy agenda now? Three-D, 11: 5-6. Available online: **www.meccsa.org.uk/pdfs/ThreeD-Issue011.pdf**

56. Practical classroom guidance on media literacy is supplied by Burn, A and Durran, J (2007) Media Literacy in Schools: Practice, production and progression (Paul Chapman Publishing)

A focus on media literacy must also account for the emergence of complex new 'digital divides'. Until recently, the digital divide was conceived as a partition between those children able to access new technology and those who could not. Now, though, it is not so much a question of access as a question of how new technology and media are being used, and the extent to which they are understood. Do patterns of computer use mirror existing patterns of socio-economic inequality, and do schools have a role to play in ameliorating these differences?[57]

In addition, there may be a widening division developing between new technology and media use outside school and inside school, with schools unable to keep up with the relentless pace of either hardware development or the appearance of new online communication services such as Bebo, MySpace and Facebook. Although such services may not seem to have a natural place in a school curriculum, the implications of these for children and young people should not be underestimated. For teachers it is becoming increasingly important to engage with the experiences that many young people (but not all, and certainly not equally) are experiencing in the popular cultural worlds accessed via new media forms[58].

57. Detailed discussion of these points is supplied by Warschauer, M (2004) Technology and Social Inclusion: Rethinking the digital divide (MIT Press)
58. See Marsh, J and Millard, E (2000) Literacy and Popular Culture: Using children's culture in the classroom (Paul Chapman Publishing)

EXAMPLE: SKILLS AND THEMES

Opening Minds[59]

The RSA (Royal Society for the encouragement of Arts, Manufacturing and Commerce) Opening Minds programme provides a framework for primary and secondary schools to develop a competence-based curriculum which aims to equip young people with the skills they will need for life and work in the knowledge-intensive and new media-rich 21st century.

The competences are arranged under five categories:

_ learning eg understanding how to learn, taking account of preferred learning style

_ citizenship eg develop an understanding of ethics and values

_ relating to people eg understand how to operate in teams

_ managing situations eg understand the importance of time management

_ managing information eg understand the importance of reflecting on and being critical about information.

Opening Minds is not an off-the-shelf initiative and the RSA does not provide schemes of work. Schools organise it as cross-curricular themed units of work, with value placed on understanding rather than the acquisition of information. Each unit consists of six to seven lessons and focuses on one or more category of competence.

Some key aspects of Opening Minds classroom practice are students working in teams, solving problems, sharing learning publicly, reflecting on competences and developing social skills. The role of the teacher is much less didactic. Teachers are not purveyors of knowledge: their role is to use a wider range of teaching and learning strategies to equip students with the skills to research and find out what they need to know.

In September 2008 the RSA opened its flagship academy school in Tipton in the West Midlands. The innovative school is state funded but run by an academies trust. It offers pupils a mixture of vocational and academic qualifications through a curriculum based on the Opening Minds competences framework. The aim of the Academy is "to encourage educational achievement and develop practical real-world skills in all students, regardless of background" and it has become the National Centre for Opening Minds.

In addition to the Opening Minds curriculum, The Tipton Academy has several features that make it different from regular state secondary schools:

_ The school day is longer, with two main learning sessions of around three hours each to afford pupils the time to focus on areas of learning in greater depth. The school year has also been modified. The academy has five terms of seven or eight weeks, each with a break of a minimum of two weeks at the end and a four-week break over the summer. This is to maximise time for learning opportunities but also to provide a better opportunity to rest and relax before the start of the next term. Parents also receive a report at the end of each of the five terms to update them on their child's progress.

_ Rather than being dictated by their age group, students at the academy take exams when they are ready to take them. The academy promises a residential experience for every student during their time at school.

_ The building is opened up every evening so the community can share their up-to-date resources and equipment. In 2010 the academy will move into a specially designed new building. Students have been involved as clients working with architects on the design process to ensure that the new building reflects their needs as 21st century learners.

59. For further details on the RSA's Opening Minds curriculum: **www.thersa.org/projects/education/opening-minds**
For more information on the RSA Tipton Academy: **www.thersa.org/projects/education-legacy/rsa-academy---tipton**
RSA Academy transforming Learning, Transforming Lives, Prospectus 2009: **www.rsaacademy.org/prospectus.html**

5. A GOOD CHILDHOOD

Even more influential on the lives of children than new technology and media are major social, cultural and economic changes. Such changes have raised many concerns that children are growing up increasingly vulnerable, and that the school curriculum needs to respond to address these vulnerabilities.

The question of what comprises a 'good childhood' in current times has generated significant debate and media attention. While there has always been debate about children, today it is especially salient because of the fast pace of change in information and communication technology and because of the perceived pressures of a consumer-based media culture.

According to the charity The Children's Society, which has conducted a major inquiry into childhood, children's overall well-being is being endangered by excessive individualism in a competitive modern age. It suggests that the increase in the belief that the "prime duty of the individual is to make the most of her own life, rather than contribute to the good of others" has tilted British culture too far "towards the individual pursuit of private interest and success", with several consequences for children:

_ high rates of family break-up

_ teenage unkindness

_ unprincipled advertising

_ too much competition in education

_ acceptance of income inequality[60].

The Good Childhood Inquiry also states that consumerism has become a major factor in many children's lives, partly due to their unprecedented purchasing power but also due to the effects of advertising and marketing in the mass media, including online. The data from the inquiry indicates that a third of children say they would rather spend time buying things than anything else, for example, and it suggests that children are increasingly becoming indirect promoters of brands through their peer networks.

Similar arguments have recently been made about childhood being 'toxic' and polluted by adult interests and media influence[61]. Furthermore, evidence collected from across Europe by UNICEF has indicated that children's well-being in the UK is the lowest on the continent[62], although the Department of Children, Schools and Families has sought to dispel some of the panic surrounding such accounts by providing its own data on children's well-being in Britain[63].

The main implication of the recent publications which criticise the problems facing children and young people today is that schools need to focus more on such things as values and social and emotional well-being, as well as on developing mutual respect between teachers and students and on promoting not only academic attainment but the development of children's happy, likeable and pro-social personalities[64]. A curriculum dedicated to supporting a 'good childhood' should address such problems as 'teaching to the test' and children's fear of failure, and it should take greater account of children's socio-economic backgrounds.

Much of the material on childhood as a seemingly 'toxic' stage of life, however, does need to be treated cautiously. At least insofar as these debates are represented in the media, the argument is generalised as if to include all children, and it is assumed that all children are equally damaged by the effects of the modern world. Although some children clearly do lead unhappy lives, it should not be assumed that children are simply vulnerable and dependent creatures who need to be protected from a cruel world.

An innovative personalised approach to the curriculum which took seriously these concerns about the effects on children's well-being of modern media, the commercial world, and the trend towards individualism would start by also taking seriously children's own accounts of their experiences in this world. It would then seek to support children and young people to make informed decisions on their own behalf, to be evaluative about what they see and understand in the world surrounding them. It would not seek solely to protect them; it would help to prepare them to make sensible decisions to protect themselves and their own well-being.

Activity

With colleagues share what you think makes a typical childhood for the young people you teach these days. Look at the data about children included in books such as Nicola Madge (2004) 'Children These Days' and, Richard Layard & Judy Dunn (2009) 'A Good Childhood', as well as in documents such as the Unicef report and the DCSF report detailed above. Discuss these questions:

_ What are our shared assumptions about children these days? What do we disagree on?

_ What do we think are the most important influences in children's lives today (eg media, family) and how should schools respond to those influences constructively and positively for children?

_ What are the implications for what you teach?

_ How does this affect the ways in which you teach?

You may wish to run a session with students from your school to see how your assumptions and beliefs about childhood match up with children's own views and experiences.

60. The report of the good childhood inquiry is published as Layard, R and Dunn, J (2009) A Good Childhood: Searching for values in a competitive age (Penguin)

61. See Palmer, S (2006) Toxic Childhood (Orion), and Madge, N (2006) Children these Days (Policy Press)

62. UNICEF (2007) Child Poverty in Perspective: An overview of child poverty in rich countries, Innocenti Report Card No.7 (UNICEF Innocenti Research Centre)

63. DCSF (2007) Children and Young People Today: Evidence to support the development of The Children's Plan (DCSF)

64. There has been recent criticism of the rise of an 'emotional' orientation in much educational commentary and policymaking. It has been suggested, for example, that such approaches can make children even more self-absorbed. See Ecclestone, K and Hayes, D (2009) The Dangerous Rise of Therapeutic Education (Routledge)

EXAMPLE: CREATIVITY

5x5x5 = creativity[65]

5x5x5 = creativity is an independent arts-based action research charity that brings together artists and cultural centres to work in partnership with schools with the aim of demonstrating how children's creativity can be fostered to fire their interest in learning.

5x5x5's approach is child-informed and is inspired by the Reggio Emilia educational approach developed in Northern Italy. Reggio Emilia recognises children's innate curiosity, respects children as active, creative knowledge builders and as leaders of their own learning. It gives them the space, time and individual support to explore and learn from the world around them.

The 5x5x5 approach fosters creative enquiry and empowers children to become co-constructors of their learning. Participating adults are seen as companions on the learning journey, not the leaders or creators. The role of the adult is also to document this journey, with the emphasis being on the process of the explorations not the learning outcomes.

5x5x5 began by working in early years settings but now works with children from nursery to Year 6, and has also involved secondary school pupils in documenting the learning journeys of younger children. One of the principles of 5x5x5 is to develop creative learning communities. Educators, artists and co-workers in cultural centres work together and aim to involve families and the wider community in learning.

In a classroom setting a 5x5x5 artist will work with a group of learners and their teachers over approximately 20 half-day sessions to set up a creative environment with a distinct atmosphere working in the belief that every child has something to contribute. The children and adults then work collaboratively on a creative project that starts from the children's interests and follows their fascinations.

Teachers and children from Freshford Primary School near Bath worked with 5x5x5 artist Catharine Naylor and a local group called Swainswick Explorers, a rural project that promotes outdoor play. The children explored the local area and listened to stories of invaders and settlers who were the first people to inhabit the land. They thought about questions such as how did the invaders and settlers build their homes? How did they protect themselves from invasion? How are we connected to the land?

The children responded to these powerful themes by building dens from their own drawings, experimenting with different natural materials and by making clay models to support their emergent stories. They became knights of the realm, guardians of camps, hunter gatherers, princesses, fairy queens and home-makers in their play. Their ideas and interests closely connected to the land and the natural world.

5x5x5 involves researching the effects of such interventions on learning, and contributes to the continuing professional development of the artists and teachers involved in the projects. Professional development time is built in to each programme of activity. During these sessions the adults involved reflect on the creative sessions. Their reflections are often shared with the children and are used to inform the next session.

To date 5x5x5's research findings show that children appear to emerge with more confidence and self esteem and they are better able to problem solve and engage in learning processes.

Although primarily an arts organisation, 5x5x5 does not simply respond to the art curriculum. It aims to provide an embedded philosophy that impacts on teaching practice and permeates across the curriculum, blurring the edges of subject teaching. The creative ideas of children, how they are expressed and how they can be supported, are seen as relevant and important across disciplines.

EXAMPLE: LIFELONG LEARNING

Effective Lifelong Learning Inventory (ELLI)[66]
ELLI is a Bristol University research project that began in 2002 with the aim of identifying the characteristics of lifelong learners and developing tools and strategies for tracking these characteristics in individuals. In addition the project investigated the effectiveness of the concept of 'learning power' in the classroom. Learning power is defined as the nature of an individual's engagement in learning and is shaped by their disposition, lived experiences, values, attitudes and beliefs.

The ELLI self-completion questionnaire or inventory is designed to measure how learners perceive themselves in relation to the seven dimensions of learning power:

_ changing and learning

_ meaning making

_ critical curiosity

_ creativity

_ learning relationships

_ strategic awareness

_ resilience.

The ELLI questionnaire provides a profile identifying an individual's learning power strengths and weaknesses. It has been used to develop learning power profiles for 2,000 learners from age 7 to adult and found that over time and through the process of formal schooling, learners became weaker across all learning dimensions, especially creativity. They became more fragile and dependent learners.

Young people considered 'at risk' (youth offenders and those not in education, employment or training) took the ELLI online inventory at the start of the six-week project to give them an assessment of their learning power. They then went through an eight-step personalised learning methodology. The approach starts from an object or place that fascinates the learner and encourages them to explore and question it, to identify a narrative relating to it and discern a knowledge map of their learning. The learner's personal map is then related to existing models of the world and gradually the student arrives at an interface between their personal enquiry and established knowledge.

The ELLI seven dimensions of Learning Power were adapted and presented in language more suited to the young people on the project. Each dimension became a 'zone' and each of these was linked to a character from the popular television programme The Simpsons. For example 'resilience' became the 'gritty zone' and was represented by Homer Simpson, 'critical curiosity' became the 'detective zone' with Lisa Simpson as its representative.

Each of 12 sessions of the project could target one or two of the zones whilst the learners worked through the eight-step personalised learning methodology. At the end of the six weeks the young people took the ELLI online inventory again to see how their learning power had changed and they also engaged in debriefing discussions about their learning.

This study found that for 'at risk' learners, the ELLI Online Inventory can be a useful tool for diagnosis and ongoing self-evaluation of Learning Power. The importance of adapting the learning dimensions to suit the learners was highlighted and it was found that the concepts involved were grasped more effectively when understanding was developed through practical activity (the personalised learning methodology). The debriefing discussions were also seen as key to the reflective process and provided the young people with an opportunity to explore their connections with themselves as learners, their sense of curiosity, wanting to know and realising their capacities to find out.

6. STUDENT VOICES

Not only has childhood changed in recent years because of the proliferation of new technologies and media affording them greater opportunities than ever before for social interaction and consumer behaviour; there has also been a wider recognition of children as people with their own rights, active and participative beings who can make decisions and choices on their own behalf, and demonstrably do so in their own social and leisure lives.

The United Nations Convention on the Rights of the Child of 1989 specifically mandates that children and young people should have a say in decisions that affect them[67]. This includes education. The boxed text shows some of the key relevant articles from the UNCRC.

United Nations Conventions on the Rights of the Child

Article 12
You have the right to say what you think should happen when adults are making decisions that affect you, and to have your opinions taken into account.

Article 28
You have a right to an education. Discipline in schools should respect children's human dignity. Primary education should be free. Wealthy countries should help poorer countries achieve this.

Article 29
Education should develop your personality and talents to the full. It should encourage you to respect your parents, your own and other cultures.

At roughly the same time as the UNCRC, there has also been a growth of research projects which put children's decision-making more firmly at the centre of schooling. This work has sought to challenge the idea that adults are 'human beings' while children are just 'human becomings'; that adults are complete, independent and self-controlling and children incomplete and dependent[68].

This kind of research emphasises children's competence in their own social lives, and suggests that in schools there should be a democratisation of curriculum planning processes that accept children's own views, experiences and interests as worthy of consideration in the classroom. Attempts to do so are often referred to as 'student voice' initiatives. They allow children and young people to have a say in curriculum design and classroom pedagogy[69].

Student voice is not straightforward, because it calls into question the existing power relations between adults and children, or teachers and students, within schools. It can be crudely tokenistic, for example by giving children choice about school uniform designs but little else, and it can even be manipulative, for instance if students' views and voiced experiences are simply used by schools to buttress new punitive codes. It has been reported that some teachers and senior leaders only hear what they want to hear when involved in student voice work[70]. The boxed text provides a series of guiding questions for making student voice meaningful in classrooms.

67. For the full text of the UNCRC articles, see **www.unhchr.ch/html/menu3/b/k2crc.htm**

68. Key texts in this area include Qvortrup, J, Bardy, M, Sgritta, G and Wintersberger, H (eds) (1994) Childhood Matters: Social theory, practice and politics (Avebury); James, A, Jenks, C and Prout, A (1998) Theorizing Childhood (Polity Press); Lee, N (2001) Childhood and Society: Growing up in an age of uncertainty (Open University Press); and Prout, A (2005) The Future of Childhood (Routledge)

69. Classroom resources and guidance to support student voice approaches are available in Arnot, M, McIntyre, D, Pedder, D and Reay, D (2003) Consultation in the Classroom: Developing dialogue about teaching and learning (Pearson); Fielding, M and Bragg, S (2003) Students as Researchers: Making a difference (Pearson); Macbeath, J, Demetrious, H, Ruddock, J and Myers, K (2003) Consulting Pupils: A toolkit for teachers (Pearson); Ruddock, J and Flutter, J (2003) Consulting Pupils: What's in it for schools? (RoutledgeFalmer); Flutter, J and Ruddock, J (2004) How to Improve Your School (Continuum); Rudd, T, Colligan, F and Naik, R (2006) Learner Voice: A handbook (Futurelab); and Ruddock, J and McIntyre, D (2007) Improving Learning Through Consulting Pupils (Routledge)

70. For discussions of these tensions, see Fielding, M (2001) Beyond the rhetoric of student voice: new departures or new constraints in the transformation of 21st century schooling? Forum, 43: 100-109, and Bragg, S (2001) Taking a joke: learning from the voices we don't want to hear, Forum, 43(2): 70-73

Student voice guidance questions

Purposes and values
Key question: 'Why are we doing this?'

_ Why is this work being encouraged/resisted?

_ In whose interests?

_ Who benefits and why?

Power and control
Key question: 'Whose voices are heard mostly clearly?'

_ Who is allowed to speak? About what?

_ Who gets heard? By whom?

_ Who is listening? Why?

Capacities and dispositions
Key question: 'What skills and attitudes do we need to develop to make this work?'

_ How are the appropriate skills developed?

_ How do people regard/care for each other?

_ Are they taking it seriously?

_ Do some people feel threatened?

Systems and structures
Key question: 'How will the school support people committed to pupil voice?'

_ Do we have appropriate systems and structures that support people interested?

_ Are there public/communal, as well as smaller, more intimate spaces to make meaning of recommendations and decide what should be done?

Actions and responsibilities
Key question: 'Does anything actually change?'

_ What actually happens?

_ Who decides?

_ Who has responsibility for embedding the change?

_ How do we hold ourselves/each other to account?

_ How is the change monitored and evaluated? By whom?

From Fielding, M (2008) Beyond Student Voice to Democratic Community: www.ioe. ac.uk/schools/efps/Beyond_Student_Voice_ to_Democratic_Community.pdf

Given its commitment to children as informed, active and participative beings with rights of their own, including the right not to be manipulated by adults and the media, it might seem surprising then that the language used to describe children in this kind of research is very similar to the language of some youth marketers:

> "Academic work on advertising tends to confirm that children are not easily manipulated or exploited; that they can understand the persuasive intent of advertising from a young age; and that they are not merely helpless victims of consumer culture... This aligns quite well with the emphasis on children's autonomy and competence that characterises contemporary research in the sociology of childhood. For some researchers at least, there is an alarming coincidence in this respect between their own views and those of marketers."[71]

Attempts to bring children's rights to the centre of curriculum innovation must, then, take account of the many factors which may influence what children have to say about their experiences. Teachers need to be sensitive to the fact that children's existing assumptions about schools and about teachers are likely to affect what they voice as interests or ideas worth exploring in the classroom. They also need to be sensitive to the fact that children are participants in a subtle and persuasive new media culture that potentially influences the ways in which they experience and think about the world around them. These considerations will affect the ways in which personalised learning can be organised.

One concern which rightly needs to be raised about student voice and its corollary in personalised learning is the extent to which it can exacerbate inequalities between children. One way in which this might happen is quite straightforward: those children who do well in school and comply with its rules are more likely to have their views taken seriously and acted upon. Yet it is those students who struggle most to accommodate school into their lives that must be heard too.

71. Buckingham, D (2007) Selling childhood? Children and consumer culture, Journal of Children and Media, 1(1): 15-24

Another potential cause of inequality is a little more subtle. Student voice and personalisation imply that children have choices to make. Yet for many young people there may be limited awareness of the choices on offer, and the choices they therefore make may not be informed. In other words, such children would, seemingly by their own choosing, be limiting their educational potential. Other, more informed students, on the other hand, could be developing their own personalised pathways through education from a fully informed roster of choices and opportunities. Again, such disparities are likely to be rooted in extant socio-demographic inequalities[72].

If children these days, then, are increasingly active participants in media culture and in diverse social worlds, able to make their voices heard and to have a say in shaping their own personalised learning, what does this imply for teaching? The 'good teacher' these days must be able to orchestrate the classroom using both a fresh understanding of curricular aims and an appreciation of the lives of children, as well as an appreciation of the impacts of complex global issues.

72. More on this subject can be found in Ball, SJ (2008) The Education Debate (Policy Press).

EXAMPLE:
GLOBAL LEARNING

Global learning – education for a just and sustainable world[73]

The DEA (Development Education Association) is an educational charity that promotes global learning in the UK with the aim that children and young people in the UK should have a firm understanding of the wider world. The increasing economic, social, political, environmental and cultural challenges of globalisation mean that schools have a responsibility to support young people to understand and respond to these complex global issues in their everyday lives.

Global learning means preparing young people for the future by fostering self awareness and open mindedness towards difference, an understanding of global issues and power relationships, optimism and action for a better world, and critical thinking.

The DEA's research has shown that pupils who experience global learning at school are more likely to feel they can do something to make the world a better place, to appreciate connections between their own daily lives and the wider world and to be open to people from different backgrounds.

The DEA works with schools and initial teacher training institutions via a network of DEA members who support educators in developing global learning in practice. The global dimensions of learning can be assimilated across the curriculum, at the Foundation Stage, all Key Stages and all subjects, using eight core concepts:

_ global citizenship

_ conflict resolution

_ diversity

_ human rights

_ interdependence

_ social justice

_ sustainable development

_ values and perceptions.

Global Dimension is a website for educators (www.globaldimension.org) provides a guide to books, films, posters and web resources which support global, intercultural and environmental understanding for all age groups and subjects. It also provides interesting examples and case studies of global learning.

A junior school in Slough set up a link with a school in Delhi to reflect the fact that 90% of its students were of South Asian origin. Through this link, children were able to stay in touch with their cultural routes and develop relationships via e-mail with students in India. The link has been useful in several areas across the curriculum for projects such as exploring global differences in weather and examining some moral issues in PSHE.

Students in a Welsh secondary school examined the stereotypes they held of life in Africa as part of a geography unit on Kenya. They began to realise that their perceptions were often dictated by what they had experienced in the media and started to challenge their stereotypes by first looking at the stereotypical image of people from Wales and contrasting that with the reality they knew.

73. The DEA: www.dea.org.uk
Developing the Global Dimension in the School Curriculum booklet:
www.dea.org.uk/uploads/4453d22a64a184b4f76a113996448fcf/s_dev_global_dim.pdf

EXAMPLE: VOCATIONAL LEARNING

Edge Foundation[74]
The Edge Foundation is working to raise the status of practical and vocational learning in the UK through inspiring projects and campaigns. Edge believes that young people are motivated by vocational and practical learning and that it should be a part of every young person's education experience. It also believes that allowing young people to choose their own paths, develop their skills and explore their talents will equip the UK's future workforce with the skills it needs.

Edge campaigns for a fundamental change in the education system so that vocational and practical learning is valued just as highly as academic learning. It wants to see genuine opportunities for learner voices to be heard, better facilities for practical education and better career guidance.

Edge Foundation's commitment to youth-led change has resulted in Edge Learner Forum, a network of young people across England committed to sustainable change in education. The aim of the Learner Forum is to provide genuine opportunities for pupil voice and pupil action by empowering young people to act as agents of change and define their own ways of bringing about change.

In 2008 Edge Learner Forum was contracted by the DCSF to investigate the new 14-19 diplomas to identify what information young people would need about them. It also worked with the Institute of Education on workshops for their PGCE students. The workshops enabled trainee teachers to engage with young people from the Learner Forum to explore issues around classroom motivation and the benefits of adopting a more practical approach to learning.

Two Edge-sponsored academies in Milton Keynes and Nottingham are due to open in Autumn 2009. The new academies will have an equal focus on practical and academic learning. They will provide high quality work experience for learners and mentoring opportunities in real local businesses.

A group of young people from Edge Learner Forum in London devised the first ever youth-led school inspection. As an alternative to Ofsted inspections, they developed Edge Instead, a pupil-led school inspection. In May 2008 the first ever Edge Instead Inspection was carried out at South Camden Community School, focusing on four key areas chosen by the students: Respect, Aspiration, Learning and Environment.

The inspection involved a team of 50 student reviewers working with staff and pupils to gain an understanding of the school, its values and its issues through workshops, observations, questionnaires and interviews. The process lasted four days and resulted in several recommendations including additions to the careers advice service, more teacher development and greater parental involvement. The whole process culminated with the collaborative development of a school action plan for the following school year which set out to meet most of the recommendations made. The process provided a unique real-life working experience for the student reviewers as well as the school gaining a greater insight into the thoughts and ideas of its pupils and staff.

74. Edge Foundation: **www.edge.co.uk**
Edge Academies: **www.edge.co.uk/project/edge-academies**
Edge Learner Forum: **www.edge.co.uk/project/edge-learner-forum**

7. PARTNERSHIPS FOR LEARNING

What gets described as 'good teaching' varies considerably. It is common to assume that most children will describe a good teacher as someone who can keep control of a class, is likeable, and can make learning interesting and fun. What gets described as good teaching when it comes to professional definitions is more complex. It varies according to time, political and economic needs, ideological perspective, and social and cultural context. A teacher at a democratic state school in the 1970s would likely take a different view about good teaching to a teacher at a private school in the 1990s.

The idea of a universal and standard 'good teacher' is therefore a convenient fiction, just as there is no such thing as a universal 'child' but many different childhoods. So what are the opportunities and challenges for good teaching when it comes to innovation in curriculum and classroom practice?

It has become fashionable to talk of teachers as partners in learning with children and their parents. Microsoft has a major global scheme called Partners in Learning, while the DCSF personalisation guide describes personalisation as depending on teachers partnering with children and parents. Futurelab's Enquiring Minds project advised a model of teacher-student partnership following this definition:

> "...taking each others' (potentially conflicting) viewpoints on academic issues... [to design curricula that] provoke discussion, disagreement and the gradual teasing out of principles of critical thinking, the transfer and interpretations of knowledge."[75]

This model of 'curriculum partnership' is neither solely teacher-directed nor wholly child-centred. Instead, it accepts that teachers and students alike have different views of what constitutes good teaching, and that this therefore becomes a matter for sensitive negotiation in the classroom.

Taking this view, the role of the teacher is to respond to what students have to say about what they learn, how they learn it, and how they are assessed. Of course, in an environment with a fixed curriculum, programmes of study and schemes of work, such a negotiating process is going to be extremely limited. The challenge is to find ways of allowing teachers to design and develop classroom activities that start from where children are, and then broaden and enrich their understandings through carefully orchestrated activities.

This model of partnership is somewhat different from the rather constrained personalisation defined through school improvement targets; it is perhaps a little more 'radical'. It comes close to what has been described as 'radical collegiality' between teachers and students, which implies that the normal boundaries separating them become more porous. Teachers and students working collegially form constructive partnerships based on a greater degree of equality in order to reflect on the processes by which schools get things done:

> "This is not about collaboration; rather it is about collegiality, a 'radical collegiality'... in which it is, on occasions, possible for teachers to learn from students, for students to teach teachers... It also requires that schools transcend the belligerent and deeply corrosive imperatives of schools as high-performance learning organisations and instead become person-centred learning communities."[76]

A focus on good teaching as a collegial partnership with students therefore implies schools becoming more equitable and perhaps more socially just sites dedicated to transformation in order to meet the needs of even the most marginalised young people, those whose participation in schools is lowest and those who most need serious changes in school.

There are a number of key implications for curriculum innovation emerging from a re-emphasis on teachers as collegial partners with students who are able to provide the critical skills of locating what gets taught to its social and historical context.

75. Brundrett, M and Silcock, P (2002) Achieving Competence, Success and Excellence in Teaching (Routledge)
76. Bragg, S and Fielding, M (2005) It's an equal thing... It's about achieving together: Student voices and the possibility of a radical collegiality, Street, H and Temperley, J (eds) Improving Schools through Collaborative Enquiry (Continuum): 105-135

Good teaching of this sort is a professionalism founded on mutual respect and trust between adults and children; it goes beyond the idea of the teacher as 'fun', 'likeable', and able to make learning interesting. Instead, it promotes the idea of teachers as equal participants in the classroom, negotiating with students what gets taught and how it gets done, whilst also bringing to that encounter a great wealth of subject expertise, contextual knowledge, and understandings about the processes through which different children learn.

An innovative approach to the curriculum founded on this model of relations in the classroom would, then, necessarily involve the participation of students in its design, planning and running. It would see students as 'curriculum co-designers' bringing into the classroom ideas worthy of further consideration and exploration.

Clearly, in addition to the potential partnerships and relationships between teachers and children, there is also a growing recognition of the role of parents in the work of schools. Parental engagement is important at a time of change in education because schools will need parental understanding and appreciation of the changes being made[77].

Activity

Think about and discuss with colleagues what you think are the main attributes of a good teacher.

_ Where do your models of the good teacher come from?

_ Ask students what they consider to be a good teacher, and probe them about why.

_ What would a good curriculum innovator be like? What would differentiate a teacher able to innovate with the curriculum from other staff?

_ How would initial teacher training and continuous professional development need to change in order to produce good teachers able to innovate with the curriculum?

77. A Futurelab report on the role of families in learning, which discusses parental engagement extensively, is available at:
www.futurelab.org.uk/projects/learning-in-families

EXAMPLE: RELATIONSHIPS FOR LEARNING

Human Scale Schools[78]

A Human Scale School is a large secondary school which has been reorganised into a number of small learning communities or mini-schools to allow for a more positive staff/student relationships. The purpose of education is seen as the development and growth of the whole person and the achievement of a more fair and just society. Implicit to this view is that close relationships between teachers and students are central to effective teaching and learning. According to Human Scale Education, those important relationships simply cannot be built in large secondary schools.

In 2006 the Human Scale Schools project was launched in the UK. The project aim is to support up to 50 large secondary schools in the UK to develop human scale principles and practices, in particular to offer support to schools wishing to undertake one or more of the following:

_ creating small learning communities made up of a small team of teachers responsible for the learning and well-being of a group of mixed-age students

_ promoting other developments based on Human Scale Education in the areas of learning, student participation and community involvement

_ creating a Human Scale School as part of the Building Schools for the Future (BSF) Initiative.

Human Scale Schools play an important part in secondary education in the USA where they have been shown to have an impact on raising attainment amongst under-achieving students. Large secondary schools are divided into several 'schools within schools'. Each mini-school is a semi-autonomous, collaborative learning community of 200-300 mixed-age students with its own headteacher. A team of multi-disciplinary teachers, who each teach no more than 80-90 students per week, work within a flexible timetable to deliver a thematic, skills and competencies-based curriculum. Students' views are valued and they are involved in decision making within their own learning community, and for teachers the pastoral and academic roles are seen as one, rather like in primary education.

Brislington Enterprise College in Bristol was the first schools within schools design to open under the BSF programme. The college has organised its students into eight small learning communities, two for students in Years 7 and 8, three for students across Years 9, 10, and 11, one community of post-16 learners and one community of learners with physical disabilities. Each of the communities has an interdisciplinary team of teachers who have the total responsibility for the educational needs of the students in that community.

78. Human Scale Education: **www.hse.org.uk**

Human Scales School Project: **www.hse.org.uk/ssp/project.html**

EXAMPLE: INFORMAL LEARNING

Learning Futures[79]

The aim of Learning Futures, developed by the Paul Hamlyn Foundation and The Innovation Unit, is to ensure that schools are "catalysts for vibrant engagement not just achievement" and that as a result more young people engage actively and positively with their learning through school, developing a lifelong commitment to learning.

The Learning Futures programme was developed in response to reported rising levels of disengagement in education and in response to the debates around how young people can best learn in the 21st century. Underpinning the project is the belief that changes in education are not keeping pace with the technology-driven change in the world young people inhabit today, and it is led by the idea that continuing with a standards-driven curriculum is not going to result in further increases in educational attainment.

The Learning Futures initiative is working with around 25 secondary schools in England to develop and test new models of classroom practice that better meet the needs of the 21st century learner and teacher. The schools will develop curriculum proposals that put into practice four key Learning Futures principles:

_ ensuring the relevance of learning for young people

_ co-constructing the curriculum and pedagogy with young people

_ valuing and incorporating learning experiences and processes both in and out of school contexts

_ varying the learner/teacher mix, recognising the value of a wider range of classroom roles than the traditional teacher-pupil relationship.

As part of the programme, each school will have a fully-funded internal coordinator who will be part of the senior management team, and staff and students will work with consultants to develop their curriculum proposals. In addition the schools will work collaboratively with other schools, each group devising models of practice that can be scaled up and used by other secondary schools.

Musical Futures, the forerunner of Learning Futures, explored changes in pedagogy for teaching music in schools, drawing heavily on the learning opportunities and learning styles more typically found in out-of-school learning. The underlying belief of the approach is that music teaching needs to start with the student's own musical interests and motivations.

There are now around 1,000 schools using and developing the Musical Futures pedagogical principles. Musical Futures lessons are always hands-on, practical music-making with student-led learning at their heart. The learners listen to and play music that they're interested in which may or may not be an area of expertise for their teacher.

During sessions students mainly work in small groups, with much credibility given to peer-to-peer learning. The teacher acts as a facilitator, offering support as and when needed. There is an emphasis on informal learning – copying, playing by ear and self-expression, rather than the teaching of technical skills. Technique is introduced but within the context of the piece being played, not as discipline in itself. After starting with music that students are motivated by, teachers then carefully plan to introduce less familiar music but within the teaching and learning strategies of Musical Futures.

The Musical Futures initiative has mainly developed in secondary schools at Key Stage 3 and findings indicated an increase in student motivation for learning music and a threefold increase in the uptake of music at Key Stage 4.

79. Learning Futures: Next Practice in Learning and Teaching booklet:
www.innovation-unit.co.uk/images/stories/files/pdf/learningfutures_booklet.pdf
Musical Futures: **www.musicalfutures.org.uk**
Paul Hamlyn Foundation Learning Futures: **www.phf.org.uk/landing.asp?id=3**

8. CRITICAL TEACHING

Critical teaching refers to the ways in which teachers can support children to recognise, on their own behalf, how seemingly ordinary and everyday objects and events are located in wider social and historical contexts. A good contemporary example is media teaching which seeks to enable learners to understand how newspapers and news websites are constructed for certain (often political) purposes.

Reflective teaching professionals can also look at the subjects they teach and begin to situate these in particular contexts. School English, for example, remains largely rooted in an established literary canon of allegedly 'great texts', while a great number of school students are likely to be more familiar with popular texts such as contemporary novels, magazines and online resources. Before the introduction of the National Curriculum in 1988, however, some schools sought to engage closely with the popular cultures of students, recognising that the extant arrangement of subjects automatically excluded some students whose own perceptions of the world were not reflected in them[80].

Critical teaching requires teachers to decelerate the pace of the classroom and to support children to take a closer, more detailed analytical view of the problems, concerns and ideas that they themselves encounter, in order to "extraordinarily re-experience the ordinary"[81]. This means developing enquiry-based practices that allow students to identify ideas for learning activities that interest them, with teachers positioned as critical pedagogues skilled in framing and probing those ideas and interests and the factors that have influenced them.

From a critical teaching perspective of this kind, the best teachers possess a range of abilities and capacities outside their own subject specialisations, including:

_ a thorough understanding of how knowledge is produced, and a desire to learn about how ideas and knowledge are produced in subjects other than their own

_ an ability to produce knowledge (ie to research topics, to find out, to make connections between ideas)

_ an understanding of the social context in which she or he is operating

_ insights into the lives of students and a willingness to engage with aspects of students' cultures

_ an appreciation of critical educational goals and purposes[82].

Critical teaching is centrally concerned with allowing children to make sense of the world they experience, something that can only be achieved if teachers appreciate and understand the lives of students, their social contexts, and their mindsets.

The 'good teacher' with these critical pedagogic skills that we have been discussing is an idealised type. But types are important when the task at hand involves re-imagining the future. Any attempt to alter the curriculum is bound to be an act of futurology, changing the prospects for children and changing the work of teachers. Critical teaching is important to the act of children imagining, and seeking to shape, their own futures.

80. See Buckingham, D and Jones, K (2001) New Labour's 'cultural turn': some tensions in contemporary educational and cultural policy, Journal of Educational Policy, 16(1): 1-14, and Jones, K (2003) Education in Britain: 1944 to the present (Polity)
81. Shor, I (1992) Critical Teaching in Everyday Life (South End Press)
82. Kincheloe, J and Steinberg, S (1998) Unauthorized Methods: Strategies for critical teaching (Routledge)

EXAMPLE: PARTNERSHIP LEARNING

Enquiring Minds[83]

Enquiring Minds (funded by Microsoft and developed by Futurelab) is an approach to teaching and learning that takes students' ideas, interests and experiences as its starting point, and provides them with more responsibility for the direction and content of their learning. It explores the idea of partnership learning, where students bring to school valid and important knowledge that is considered worthy of consideration in the curriculum.

The rationale for Enquiring Minds is that the organisation of school subjects can be out of touch with the reality of children's lives. It approaches subjects and the curriculum by proposing that learning can start from children's own perspectives, and, through enquiry-based learning, introduce them to powerful subject knowledge, skills, and critical thinking. It is an attempt to link children's lives with the curriculum.

It was developed by researchers at Futurelab and teachers in two comprehensive secondary schools. The programme aims to support children to be:

_ inquisitive and curious about things they experience in their everyday lives

_ able to pose problems, ask questions, and recognise issues they would like to explore

_ able to develop an understanding that all knowledge changes over time as people challenge, shape and contribute to it

_ confident that they too can challenge, shape and contribute to knowledge

_ aware that there are always multiple perspectives for looking at, analysing and understanding things

_ able to propose solutions to problems and questions, and to know how to pursue these solutions.

It aims to see students becoming progressively more responsible for the content, processes and outcomes of their learning so that as they undertake further enquiries they become increasingly more responsible for content each time.

In Enquiring Minds teaching and learning, students undertake an enquiry into an area that interests them, ask questions and are supported to answer them. Teachers work with pupils to help them draw on their own lives and experiences to discover things that interest them, excite them and make them curious. Pupils are then supported to define an idea or question that they would like to research further.

Their research might involve doing internet research, making prototypes, and involving other people in their learning, perhaps by contacting an expert in their chosen area of enquiry. The teacher's role is to guide the students in their research process by having regular conversations with them about their progress, to encourage them to be critical about various sources of knowledge and to allow them some control over their own time but agree deadlines with them.

The outcomes, communication and presentation of enquiries take a variety of forms, including presentations, websites, video documentaries, podcasts, or written documents. It is important that students have a 'real' audience for their presentation and as such must carefully consider content. Students also evaluate their enquiries. This can take the form of a self report or peer evaluation against criteria co-created by pupils and teachers.

The writer shows...
The writer uses...
The writer argues...
The writer compares...

Evidence (from the text)

For example, "(quote)"...
An example of this is, "(quote)"
For instance, "(quote)"

Explanation

make
sugge

9. CONCLUSION: PERSONALISATION AND CURRICULUM INNOVATION

Previous sections have examined some
key considerations, arguments, debates
and policies in current attempts to reconsider
what a school curriculum is supposed to do
and how it does it. In this section we discuss
the main emergent points from policy, research
and practice in order to derive some common
principles for curriculum and classroom
teaching innovation that we believe makes
for truly personalised learning.
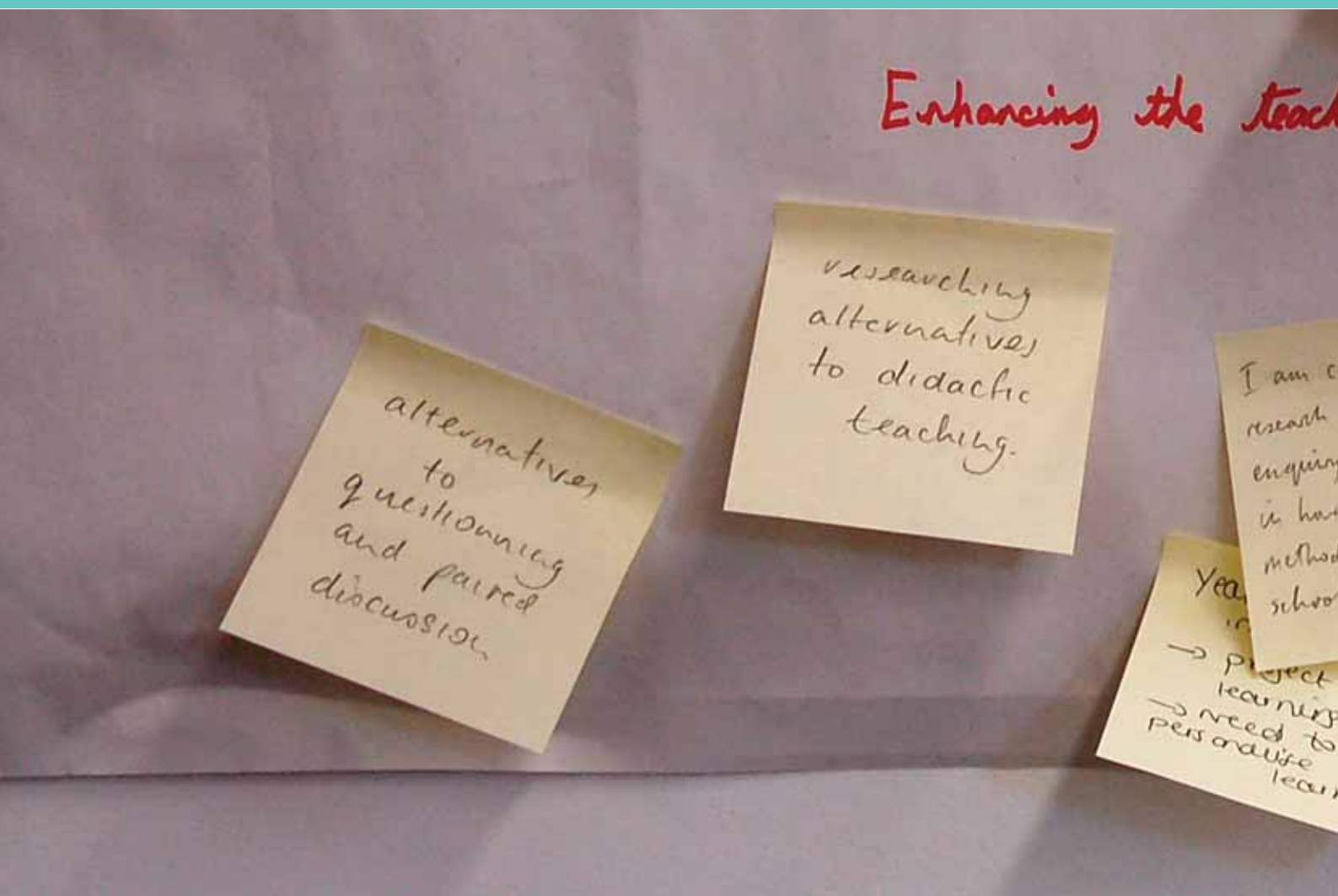
Summary

It has been shown how the dominant policy framework of personalisation underpinning the Every Child Matters agenda and The Children's Plan is related to larger political imperatives of national development in an increasingly global context. It is worth restating that what goes on in schools is not isolated from these larger frameworks, since schools are positioned to ensure that Britain is a highly skilled, competitive and successful country. So personalisation must take account of the discussions raised throughout this report.

It has been shown how curricular debates in the research community, in the charitable and 'third' sectors, and in the private sector of corporate organisations, are seeking to establish ideas about schooling that serve subtly different agendas and interests. The dominant way of thinking is that children are growing up in a rapidly changing world and schools cannot keep up or sufficiently prepare them to deal with it, either as a citizenry or as future labour.

The ways in which childhood and teaching are conceived and debated has been explored, with a range of implications drawn for the arrangement and implementation of innovative approaches to the school curriculum. Throughout, a series of case studies and examples of innovative approaches to the curriculum has been presented in order to illustrate how policies, theories, manifestos and ideas have commuted to practice.

Emerging ideas and concerns about digital media, good childhood, children's rights, student voice, partnerships, relationships and critical teaching all need to be considered together alongside the dominant policy motif of personalisation in innovative curriculum design. For personalisation to become a truly meaningful and practicable approach to the classroom it needs to include an appreciation of the types of childhoods experienced by students, of whatever age.
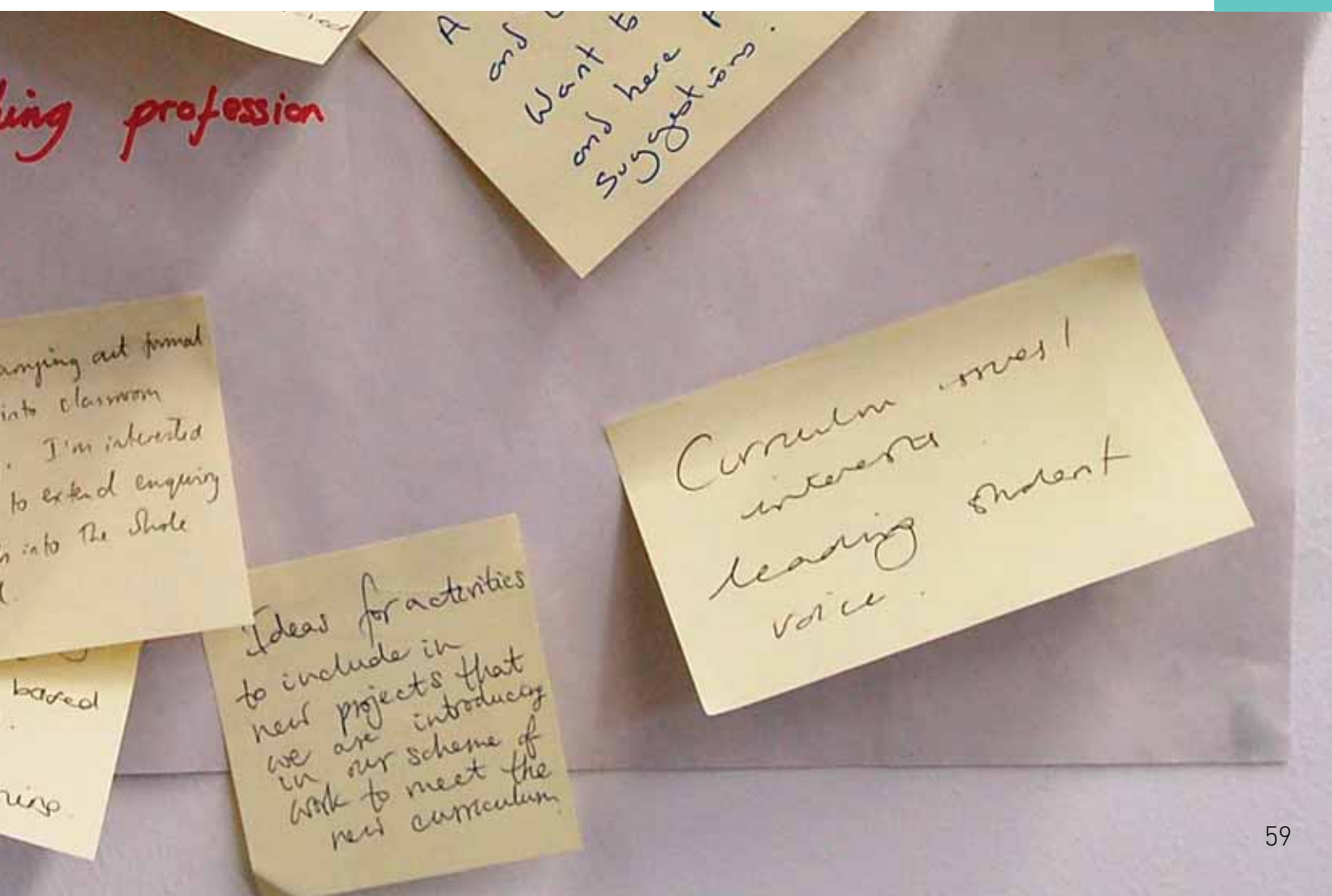
Personalisation in practice?

Throughout the handbook, we have been attempting to identify what we believe are the most important questions and issues to consider in redesigning the curriculum or in planning for educational change. We have attempted to show how policy and research can impact on classroom practice. At this stage, it is plausible to suggest that personalised learning is at a crossroads moment, where it has taken on heightened significance in policy texts, but is being questioned in the research as a tenable, practicable, or even comprehensible concept for educators.

The problem, of course, is that policy and research rarely agree; personalisation is a good example of this kind of discordance. From the examination we have conducted of the various curriculum approaches and initiatives in British schools at the present time, we believe that personalisation remains a working idea that, as yet, is not associated with any particular methodology for curriculum design or for pedagogical implementation in the classroom.[83]

The challenge for schools and teachers at the present time is going to be to make sense of the research and the policy, and then to devise their own practices around personalisation. It's our sense at this stage that educators should be asking themselves to what extent the policies and available research help them to do this. Personalisation is not just about 'tailoring' children's learning: it involves the 'personalities' of teaching professionals too.

Personalised approaches to innovative curriculum design and planning should, then, take as a starting place a commitment to children's own experiences and perceptions of school, as well as their experiences in a changing social and cultural landscape where new media are becoming increasingly important for everything from maintaining friendship and peer networks to consumer purchasing.

83. The House of Commons inquiry into the National Curriculum strongly recommends ensuring teachers have access to research and support in sharing effective practice

Personalisation should come from teaching professionals, so that change in schools reflects teachers' professionalism and personalities. This means that school change contains the values and morals of the people involved in it; it is rooted in school cultures and professional cultures, as well as in the cultures of young people and their wider communities.

Personalisation is inherently rooted in the idea of providing coherence in learning for children by ensuring that children are represented in the design of learning experiences. They should be granted some degree of voice, a right to make decisions about important things that affect them.

This does not mean teachers renege on their responsibilities as professionals. It requires teachers and students to work closely together, with teachers making the very most of their professional expertise as bearers of subject knowledge with an understanding about the contexts of the children in their schools, and a repertoire of craft skills that can be deployed where and when appropriate, relevant, and most suited to immediate requirements.

This kind of personalised teaching and learning is an innovative approach to the curriculum that values staff and values children as people in their own rights with knowledge and skills that are worth considering in the classroom. The task for teachers is to sensitively coax this knowledge from children, and to help shape children's strategies for dealing creatively and critically with a complex and changing world.

The checklist on pages 62-63 shows a wide range of components that should be considered in attempts to innovate in the curriculum in order to personalise learning to children's needs. It is not a definitive list, nor a recipe for successful innovation. Use it to consider your aims in innovating with the curriculum or with teaching practice, and to consider the practicalities of doing so.

Components
21st century skills
Children's and young people's experiences
Competences
Continuous professional development
Critical thinking skills
Cross-curricular/interdisciplinary connections
Emotional literacy
Global learning
Media literacy
Stakeholder engagement
Partnership pedagogy
Personalisation
Student voice
Teacher-student relations
Thematic curricula
Well-being

Implications for practice

→

→

→

About Futurelab

Futurelab is passionate about transforming the way people learn. Tapping into the huge potential offered by digital and other technologies, we are developing innovative learning resources and practices that support new approaches to education for the 21st century.

Working in partnership with industry, policy and practice, Futurelab:

_ incubates new ideas, taking them from the lab to the classroom

_ offers hard evidence and practical advice to support the design and use of innovative learning tools

_ communicates the latest thinking and practice in educational ICT

_ provides the space for experimentation and the exchange of ideas between the creative, technology and education sectors.

A not-for-profit organisation, Futurelab is committed to sharing the lessons learnt from our research and development in order to inform positive change to educational policy and practice.

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Written by leading academics, these publications provide comprehensive surveys of research and practice in a range of different fields.

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Drawing on Futurelab's in-house R&D programme as well as projects from around the world, these handbooks offer practical advice and guidance to support the design and development of new approaches to education.

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Becta is the government agency leading the national drive to ensure the effective and innovative use of technology throughout learning. It is our ambition to utilise the benefits of technology to create a more exciting, rewarding and successful experience for learners of all ages and abilities, enabling them to achieve their potential. We do this in many ways. We make sure the right technology is available, we influence the development of policy, and we set standards and provide tools that help establish and promote best practice. We know that technology has the potential to transform learning. We are committed to inspiring education providers to realise that potential, and equip learners for Britain's future success.

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