Introduction
Following its three Annual Reports in 2004, 2005 and 2006, the Nuffield Review is now producing Issues Papers which focus upon specific areas of concern, with a view to widening the debate. Clearly the quality of learning is one area of considerable concern.

Problem and proposed solution
Despite constant reporting of improved test and examination results, there is disquiet about the quality of learning. Universities say that young people come ill-prepared for the kind of learning which universities value. Employers complain that young people lack the skills, knowledge and attitudes which serve business and the economy. Many young people drop out of formal learning, bored with what they see to be irrelevant or judged as learning failures in the all-pervasive testing system. And, according to the Chief Inspector of Schools, the learning experience is narrowed because of the constant teaching to the test – an inevitable consequence of the importance attached to grades. Indeed, even those who succeed often feel disillusioned by the experience they have undergone.

Their solution to the problem is to specify more precisely ‘learning objectives’ - the list of targets which can be measured and which, if successfully hit, earn a qualification. Complaints about quality of learning are met with an ever more detailed framework of qualifications, each component of which is elaborated through a list of ‘learning specifications’.

For example, the new Foundation Learning Tier (FLT) is intended to replace the complex range of qualifications below Level 2. It is created out of units taken...
from those qualifications, overlapping, for instance, with the Level 1 Diplomas\(^5\). Therefore, learning for this group is shaped by the preconceived learning outcomes of the planners, not by the learning needs of the learners. As Stanton argues in *Learning Matters*,

> The learning needs of those with below average academic attainment have never been properly addressed, despite the fact that – by definition - they form half the cohort.\(^6\)

And one might add to ‘learning needs’ the ‘learning wants’ of these young people.

**Questions**

Given the widespread concerns about the quality of learning, the Review has questioned the narrow understanding of learning within the system. It is asking:

What does it mean to say someone has learnt successfully?

Are certain kinds of learning neglected?

What connection should there be between learning and its assessment?

**Different kinds of learning**

There prevails a limited understanding of learning, shaped by modes of assessment and a qualifications framework which promote what is easily measurable\(^7\). But there are different kinds of learning. A ‘world class educational system’ needs to attend to these differences.

**Practical learning**

A distinction is to be made between *learning that* (propositional knowledge) and *learning how to* (practical knowledge).

Propositional knowledge is the knowledge of the physical and social world which can be put down in statements, verified by reference to experience, give rise to explanatory theories and be transmitted as such to the learner.

Practical knowledge (*knowing how*), on the other hand, often escapes articulation in *knowledge that*, even if attempts are made to write about such practical knowledge. A person knows how to ride a bicycle without being able to describe that knowledge. Indeed, a person, who tries to ride a bicycle after reading a book on how to, might well fall off. Such practical knowledge is gained from practising, albeit often under correction. Moreover, it is assessed through the ‘successful doing’, not through writing about doing.

The importance of ‘hands-on learning’ is reflected in the *14-19 Education and Skills* White Paper. As a result of the Increased Flexibility Programme, thousands of young people aged 14-16 now undertake part of their studies in the more practical environment of the local College of FE. Evaluation points to the success of this initiative\(^8\). But it is mainly directed at those who, unmotivated by academic


\(^7\) See an account of this in Mansell, W., 2007, *Education by numbers: the tyranny of testing*, London: Methuen.

work, are more likely to be motivated by the practical. And this attention to the practical in so-called ‘vocational’ courses for the less engaged does a disservice both to the importance of practical learning for all young people and to the status of courses relevant to employment, such as those provided by in apprenticeships.

But what has been lost in schools is a tradition of learning based on practical engagement, reflected in the near demise of woodwork, metalwork and home economics, in the decline of field-work in Geography\(^9\), in less experimental approaches to the study of science (caused partly by assessment through written examination), and in the decline of work-based learning and employer related apprenticeships\(^10\).

**Understanding concepts and principles**

To acquire knowledge of something requires the mastery of distinctive concepts, principles and theories which are elaborated through what we refer to as subjects and into which we need to initiate young people. You cannot get very far in understanding healthy management of life, for example, without having some grasp of theoretical concepts, such as those of calories, protein, carbohydrates, and vitamins\(^11\).

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\(^10\)See the table in Stanton, op. cit. p.6, derived from *DCSF Statistical First Release*, 2007.


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**Relevant learning**

Both practical and theoretical knowledge, to be meaningful, need to be related to experience, that is, to the ‘lived world’ of the young person. Too often that is not the case. Schools are places set apart, and the experiences, which actually shape the young person’s perceptions, interests and thinking, are often disconnected from the learning programmes they have to undergo – let alone allowed to shape those learning programmes in any way.

**Enhancement of learning through technology**

Advances in information technology could (and does in many cases) transform the quality of learning. But ICT skills of learners often outstrip those of teachers, affecting the relationship between teacher and learner\(^12\). Also on-line community networks, such as that developed by NAGTY, transform the quality of learning through very different sorts of interaction, but also extend the space in which we should be thinking about learning. BECTA is researching into what makes a provider ‘e-enabled’\(^13\).

There are now several on line community providers such as: *Smartlab Digital Media Institute* (hi-tech after school clubs for children in run-down neighbourhoods); *Notschool.net* (on-line community working with the disaffected outside the school system); *Futurelab: enquiring minds* (bringing the curriculum more into line with the changing needs of young people); *Creative Partnerships* (support via a website and a national database which teacher

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\(^12\) At Oaklands College in Herts. 35 students are employed as ‘e-mentors’; they do the teaching.

\(^13\) See [http://about.becta.org.uk/](http://about.becta.org.uk/)
training institutions, museums, etc. are encouraged to join.

**Conclusion**

The importance of different, more practical and more relevant approaches to learning, drawing upon the resources provided by new technologies, is increasingly recognised, and contrasted with an experience in which the learning takes place almost exclusively in classrooms, with emphasis upon written work and a curriculum divided into subjects. There is increased recognition of the need to adapt the curriculum to the personal needs or styles or contexts of the individual learner, as is reflected in the emphasis upon ‘personalised learning’.

Such recognition of ‘relevance’ and ‘practical learning’ should not be construed as critical of academic work or standards. Academic work can be taught in such a way that it is seen by the learners to illuminate matters of deep concern.

Rather should that recognition of relevance be construed as a criticism of learning which is promoted from a mere ‘transmission of knowledge’.

Hence, the question is: how can learning be so organised as to cover the range of practical as well as intellectual concerns of young people - to motivate them through relevance to those concerns, to illuminate their experience and to help them manage their lives intelligently?

**Standards**

Implicit in all that has been said is the importance of standards, and, indeed, it is the aim of the Government to raise standards of all learners.

But what are ‘standards’ and how do they relate to what has been said about learning?

Standards are the benchmarks by which we judge a learning activity (academic or practical) to have been successful. They logically relate to the nature of that which has to be learnt, and thus there are as many standards as there are different kinds of learning. Those related to thinking mathematically are different from those related to thinking historically. One has not learnt ‘fractions’ unless one is able to apply certain concepts appropriately and perform certain mental operations correctly. To have learnt something, the learner has to come to internalise new standards of correctness and to know how, in new circumstances, to apply those standards.

Therefore, there are several problems in the present policies aimed at raising the standard of learning.

First, too often standards are identified with targets, as though they are the same. If you train a person to hit certain targets, then one is told that they have met the standards. But this is an elementary confusion. What the students have learnt is to hit the targets. The standards implicit in the activity of ‘hitting targets’ may bear

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14See section below Innovative approaches to learning, but also the current monitoring of the curriculum at Key Stage 3 and the evaluation study by NFER Harnessing Technology: schools survey, 2008.

15See TLRP, 2004, Personalised Learning: a Commentary for an account of this, pointing to the tensions between this on the one hand and the national assessments which cut across the more individualised learning.
little relation to understanding the key concepts, or being able to apply those concepts in new situations.

Second, standards must be defined in terms of the aims of the activity – of doing mathematics, playing golf, or becoming a good citizen. What counts as ‘the standard’ depends on the aim of the activity. Where those aims change, then standards change. Standards which were relevant 20 years ago might not be relevant today. Hence, the difficulty of comparing performance over time.

Third, a national framework of qualifications requires a statement of ‘equivalence’ between different standards. But in what sense can different standards be said to be equivalent? To sort this out is important. Level 2 apprenticeship qualifications (e.g. in engineering and in retail), though seen as equivalent in terms of level, can differ widely in terms of learning difficulty, study contact hours and appropriateness for progressing to further study. What does it mean to say that the learning in an Advanced Diploma is equivalent to that attained through three and a half A Levels?

What follows from this?

Standards of learning depend on the nature of the many things which we believe are important for young people to learn. And they in turn depend on what we believe to count as an educated 19 year old in this day and age. What is the kind of knowledge and understanding that such a person should learn? What are the practical capabilities which should be acquired? What are the attitudes and dispositions which we seek to develop?

It has been a mistake, therefore, in the recent past for the Secretary of State to attribute failure to schools on the narrow basis of a few GCSE results, ignoring the range of learning which has taken place in response to different educational aims and to the needs of different communities.

The voice of the learner

Issues Paper 11 draws attention to the importance of heeding the learner’s voice if those who are disengaged are to be brought back into education – working ‘on and from young people’s territory as determined by their definitions of space, needs, interests, concerns and lifestyles’.

Although that Paper was written about those who had dropped out of education, the principle is equally applicable to all learners. Informal learning in and out of school, and the learner’s aspirations and motivations need to be the object of education rather than be marginalised by it. The evidence for ‘the learner’s voice’ in the planning and the development of learning is considerable. It is a principle in the government’s own espousal of ‘personalised learning’, which speaks of learners as learning resources for other learners, participating in the review of


learning programmes, providing feedback on lessons and involved in staff selection.

But respect for the learners needs to go further than that. The students' concerns and experience outside the school might well provide the material for relevant learning. After all, the humanities at their best deal with those matters of human concern which absorb the minds of young people\textsuperscript{19}. Discussion of such matters, disciplined by evidence, should be at the centre of learning, not at the periphery\textsuperscript{20}.

### Innovative approaches to learning

Despite the generally negative picture portrayed to the Review concerning the narrowing of the experience of learning, there is also welcome evidence of exciting and innovative practice where schools and colleges feel able to break the mould.

Indeed, the 2006 Education Act allows schools to suspend parts of the education requirements to pursue more radical ways of learning. The official emphasis on ‘personalised learning’ would also suggest more flexible approaches. And there are many examples of how more practical engagement by the learner might be achieved, endorsed by the DCSF in the 2008 *Alternative Provision White Paper* and supported by the Innovation Unit.

The Innovation Unit’s ‘Next Practice’ education programme supports schools as they take forward their own cutting-edge ideas to improve education.\textsuperscript{21}. It is felt that there is a mismatch between the kind of knowledge and competence needed by young people and what is promoted within the education system.

Recent work with the Innovation Unit\textsuperscript{22}, concludes that

- schools must pay attention to changing relationships with their pupils and communities;
- qualifications should not be seen as the only goal of education - there are often better ways of promoting the cognitive skills needed as adults;
- size matters – big schools need to be broken into smaller units;
- there is need for more flexible grouping, timetabling and mentoring;
- there is need for greater learner input into what and how to learn.

There are now many examples of developments which reflect these principles. Many schools are involved, demonstrating, in a way which is rarely publicised, how there is room for innovation in the system to meet its critics. The following are a few examples:

**Royal Society of Arts Open Minds Project**

The recognition of the distinctive quality of practical intelligence (the integration of theory and practice) was reflected in the RSA’s *Manifesto of Capability* in 1986. Within that tradition, the RSA has developed its programme ‘Opening Minds: Education for the 21\textsuperscript{st} Century’, which is increasingly adopted by schools

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\textsuperscript{19} See Issues Paper 8 *14-19 Curriculum: The Humanities*.

\textsuperscript{20} See the Bullock Report, 1975, ch.10, for an excellent account of the significance of oral skills and discussion in *Language for Life*.

\textsuperscript{21} [www.innovation-unit.co.uk](http://www.innovation-unit.co.uk)

disillusioned by a target-driven National Curriculum which does not reflect these practical capabilities.

Paul Hamlyn Foundation’s Learning Futures brings together the Foundation’s long interest in education, the arts and social justice. In asking how young people best learn in the 21st century, it argues that there is a need to adopt a very different approach. This is illustrated in its Musical Futures. 20 schools took part in 2005. That has risen to 700 in 2008, reflecting the desire in schools for a different approach if students are to be engaged.

The Edge Foundation aims to raise the status of practical and vocational learning amongst 14 to 25 year olds of all levels of ability through a number of projects, including the funding of teacher training programmes focusing on practical learning, Lewisham College of FE and South Bank University being leading partners. It believes that all young people should experience high quality practical learning as part of a broad education.

Young Foundation Studio Schools, in partnership with seven Local Authorities, integrate learning with running businesses based in schools. The focus is on practical competence which employers say is lacking in young recruits.

Human Scale Education has a network of schools which emphasise the importance of smaller schools, or ‘schools within schools’, to ensure closer relationships between teacher and learner, regarded as essential if the needs of the learner are to be recognized and attended to.

The ‘Challenge Programmes’ of UK Skills shows how practical projects (for example, creating and constructing flower beds in a primary school playground) made demands on the enterprise, creativity, cooperation, construction skills, organisation and moral responsibility of young people which transformed them from reluctant to enthusiastic and responsible learners.

Evaluation studies are being carried out on these and other innovative programmes. But there are inevitably difficulties in such studies because what is being challenged is not the effectiveness of current curricula and pedagogy but the idea of an educated person which underpins them.

But the recent past has seen imaginative learner-centred programmes, from which future policy and practice could fruitfully learn – e.g. CGLI 365 courses, following the blueprint of the Further Education Unit’s A Basis for Choice, or the creative

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24 See www.edge.co.uk
25 National Employers Skills Survey in England, 2005, found that one in four job vacancies were hard to fill because of a lack of suitably skilled applicants.
26 See www.hse.org.uk, and Tasker, M., 2003, Smaller Structures in Secondary Education: A Research Digest,
27FEU was established by the DES in 1978 to support curriculum in FE, when colleges were taking students who had done poorly at school and needed further education and guidance. A Basis for Choice, 1979, was a key document in shaping an alternative, learner-centred approach.
initiatives started under TVEI\textsuperscript{28}. What was characteristic of them was the active and participative approach to learning. But, unfortunately, they were lost within a standardised qualifications framework. TVEI, for example, did not survive the arrival of the National Curriculum.

The Review is examining the many ways in which young people, often regarded as failures when they do not ‘hit the targets’, can come to love learning, be highly motivated and succeed. This so often emerges from a change in the relationship between teacher and learner, and in the style and place of learning.

**Assessment for learning**

Reference has been made to the effect of testing and assessment on learning. Many of the problems have arisen from the confusion between assessment for learning (that is, related to the learning needs of the student) and assessment for accountability (that is, related to holding schools, colleges and national system to account). The aims are quite different and assessment geared to the latter does not help with the former.

In particular, there is need for assessment which does justice to the wider aims of education which the Review argues for. That assessment would provide a record of a range of personal achievements and practical capabilities.

Of this there are examples popular in schools and colleges but without the deserved recognition amongst those who impose a more restrictive mode of testing.

ASDAN’s\textsuperscript{29} suite of qualifications is highly popular in schools and colleges wanting wider qualities and skills recognised. Its courses are established in over 5000 centres with 15000 learners. CoPE (the Certificate of Personal Effectiveness, is recognised within the National Framework of Qualifications.

**Conclusion**

What then might we conclude from these examples of teachers struggling to do things differently, often against the constraints of an examination led curriculum? Lord Putnam summarised it thus:

This means rethinking the National Curriculum to ensure its relevance and usefulness to children. It means reworking our assumptions about how and where learning takes place, whether at school, at home, online or in the community; it means celebrating teachers’ and children’s achievements wherever and whenever we find them. Crucially, it means identifying the knowledge, skills and responsibilities that must be nurtured in our children.\textsuperscript{30}

Richard Pring has been responsible for the production of this Issues paper – richard.pring@education.ox.ac.uk

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\textsuperscript{28}Technical and Vocational Education Initiative, under the Manpower Services Commission, started in 1982.

\textsuperscript{29}ASDAN: Award Scheme Development and Accreditation Network.