

2008 SUMMER SCHOOL

SUBJECT PRESENTATIONS

PLENARY DISCUSSIONS

DELEGATE COMMENTS

SUBJECT PRESENTATIONS

The Summer School programme was run with a view to presenting the conclusions of all the discussions to the Secretary of State and Schools Minister on the Wednesday and a panel of educationalists on the final morning. These were:

Science:

1. The unique value of the Summer Schools

- Sharing examples of good practice helps teachers to realise that many of the barriers that they face in schools are within their own powers to break down.
- The experience of being taught at the Summer School by leading academics re-enthuses teachers and gives them exciting new material to take back to their classrooms.

2. Professionalism

- The liberation of the KS3 curriculum places on Science teachers the responsibility, which most of them welcome, to maintain subject rigour and use their professional judgement in developing students' understanding of and passion for the subject.

3. Assessment

- Current modes of assessment are often unchallenging and do not encourage deep or lateral thinking. Teachers can and should be involved in creating a better system which will engage, motivate, and develop students.

4. High Level Thinking

- The acquisition of skills and of subject knowledge in depth should not be mutually exclusive but interdependent. Students should be taught to think analytically and creatively, and to evaluate evidence. The ability to interrogate information critically and to accept the principle of uncertainty is essential to intellectual and personal development.

Geography:

1. The place of Geography in the Curriculum

- Geography enables students to make sense of the complex world in which they live, unifying their understanding of the human and physical environment, and providing the key to making informed decisions about many critical 21st century issues.
- A subject of this importance needs to be taught by specialists.
- Fieldwork is an essential component of effective and inspirational Geography teaching.

2. Geography and Skills

- In spite of the importance of the subject, recognised in the Action Plan for Geography, it is in some schools losing curriculum time to a skills-based approach to learning and to the pressure of assessment in core subjects.
- Functional skills can be delivered best through subjects, and Geography provides an effective medium for doing so.

PLENARY DISCUSSIONS

Panel of Sixth Formers

A Panel discussion on the question of Why Subjects Matter involved four Sixth Form students drawn from two large mixed Comprehensives in the London area.

These were the main points that they emphasised:

- the importance of Geography because of what it contributes to the understanding of major human issues such as Third World Debt, and of physical issues such as Climate Change;
- the attraction of Geography in the way it lends itself to open-ended discussion and relates to so many aspects of personal experience;
- the interest of Chemistry arising from the opportunity to apply theoretical knowledge to practical ends such as the creation of fuels and medicines;
- the interest of Biology that lies in learning about yourself and your body and the creation of life;
- the crucial importance of having teachers who are enthusiastic and knowledgeable about their subjects, and who are able to communicate this passion to their pupils;
- the desirability of studying subjects rather than themes, because the study of subjects encourages depth and the broadening of knowledge through the exploration of ideas.

Panel Discussion 1

Bernice McCabe (BMC)
Rt Hon Ed Balls (EB)
Andrew Adonis (AA)

Chair
Secretary of State
Minister for Schools

BMC: What in your view makes Science and Geography such important subjects?

EB: What made the most impression on me in my schooldays was the experience of particular lessons by particular teachers who were able, as in Economics, to relate the theory to the realities of the contemporary world, thereby making the subject come alive. Science and Geography also provide this sort of opportunity, and the essential thing is to have inspirational teachers who can make these connections, and so capture the attention of their pupils and make them want to learn.

AA: My scientific education was limited to a C grade in Physics O level; my mathematical education was similarly restricted. This was certainly no Golden Age in schools. It was just because so little Science was being taught in some schools that a broad Science programme was developed as part of the National Curriculum. We are now placing an emphasis on individual Science subjects, with specialist teachers, by making it a requirement of Science Specialist Schools to teach the three Sciences as separate subjects for those who can benefit from it. As for Geography, the burning question is: should it be compulsory beyond KS3? Many other subjects, like History and Design Technology, are competing for attention. In our view all are important. The job of the Government is to recruit good specialist subject teachers and support the development of subject teaching, e.g. by providing online resources. Beyond that, it's up to individual schools and pupils to make their choice, and teachers to market their subjects.

BMC: Teachers flourish when given autonomy in the classroom. How important do you think this is in the role of the teacher?

EB: Ofsted says that we have the best ever generation of teachers, but we need more of them; even some strongly led schools, in difficult areas, have problems in recruiting core subject teachers. I would certainly like to see more opportunities and incentives for teachers to develop professionally in the job, as lawyers and accountants do. Great teachers make all the difference, and we are trying to put more control into their hands through, for instance, the flexibility that we are building into KS3

Presentations by Teacher leaders in Science and Geography

BMC: Why is subject depth vital in preparing pupils for their future lives?

EB: Knowledge of e.g. Maths and IT, and skills such as developing an argument, that one might learn in History, are necessary both for understanding the world around us and for making our way in it.

BMC: But, in the perception of teachers, there has been a consistent trend in the erosion of subjects at the core of the curriculum.

AA: I don't agree. Over the past twenty years the content of subjects at the core has been strengthened through the National Curriculum and also enlivened through constant updating, as in the Action Plan for Geography. Teachers are also being encouraged to update their skills and

subject skills. In line with this is the decision in principle to make a Masters qualification, with a strong subject element, a normal part of a teacher's training.

Martin Roberts: But there are mixed messages coming from other quarters. David Lambert (*Professor of Geography Education at the Institute of Education*) suggests that there is "an anti-subject wind blowing in the system"; and this is evident in recent pronouncements from, for instance, the RSA and Microsoft.

AA: The people most passionate about the importance of Geography as a subject, including David Lambert, are at the heart of developing its role.

Jim White: How do you view the skills-based initiative in our schools?

EB: You have got to motivate children and you need inspiring teachers to do that. Certain skills needed in later life, such as teamwork, IT, verbal communication, and problem-solving, are generic, and these can and should be taught in the context of particular subjects.

Stephen Miles: Less than 5% of the Professional Standards laid down for the training of teachers relate to subjects. Will the new Masters qualification have a larger subject component?

AA: Subjects should certainly have an important place in Teacher Training; the National Curriculum is after all subject based. But schools have also got to make their own decisions about how they deploy their training resources, and we would encourage them to include subject-based training.

EB: The new Masters qualification will be piloted this autumn. It will be available to teachers in their first five years of teaching and will be done on the job. There will be some special lines within the Qualifications, such as Leadership and SEN, but there will be a strong emphasis on subjects and opportunities for subject-specialist components.

Oliver Blond: As a Headteacher I have to deal with 39 other things crossing my desk – matters of regulation and inspection and suchlike, coming from any number of different agencies with no indication of a co-ordinated approach – before I can start talking to teachers. And the work of the teachers themselves is similarly hampered.

David Rayner: There is a genuine concern among teachers about the place of Geography as a subject within KS3, as it loses ground to the *Learning to Learn* initiative.

AA: You need to stand up for your subject. As for the point about over-regulation, the burden in some areas, such as Ofsted inspections, is being reduced. We accept that we have a responsibility not to impose excessive regulation and in general we are trying to give schools more freedom of choice and self-regulation even though this entails the Government making some difficult and contentious decisions, such as removing the compulsion to teach Modern Foreign Languages at KS4.

Eric Nicol: There may be more flexibility at KS3, but how can teachers be given the confidence not to teach to the test?

EB: The best teaching will take the test requirements in its stride; but we do need tests to ensure rigorous learning. If there is something wrong with the system and with the balance of testing, we must look at it. It is certainly not our intention. Or does the problem lie with school leadership not doing enough to encourage good teaching?

Panel Discussion 2

Bernice McCabe (BMC)	Chair
Jon Coles (JC)	Acting Director General for Schools
Graham Holley (GH)	Chief Executive, Training and Development Agency for Schools
Prof John Holman (JH)	Director of National Science Learning Centres and Salters Professor of Chemical Education, University of York
Sue Horner (SH)	Head of Standards & Assessment Policy, Curriculum Division QCA

PRESENTATIONS BY SCIENCE TEACHERS

Eric Nicol: How should we encourage and provide for teachers to keep up to date with their subject and, more particularly, will the proposed new Masters degree in Teaching and Learning have a significant amount of subject content?

GH: I am glad to hear from the Science presentations that the teachers feel empowered to use the freedom and flexibility that is being built into the curriculum. The Government aims to provide a framework, not a straightjacket. We are still working on the design and content of the new Masters degree, with regional consultation; but it is clear that there will be core elements, essential for the job, like assessment for learning and classroom management; and then electives which will include subject knowledge and things like SEN.

JH: It is good that this sort of professional development, with subject knowledge at the centre, is to become part of the licence necessary to operate. Teaching should, in this respect, be no different from other professions.

JC: It offers a massive opportunity for the profession to transform its culture of training.

GH: The course will be practice-based, rooted in what happens in the classroom. It will be spread over five years and all done on the job, with the initial elements embedded in the PGCE and Induction years, and the bulk of the 180 constituent credits set in years 2,3, and 4. Faculties of Education with the highest rating will provide the subject element by drawing upon the University subject departments.

Besma Mussadaq (student): One of our lectures was about University admissions. The lecturer talked about the lack of students' ability to solve problems and their reluctance to take intellectual risks. What can be done to develop pupils' abilities in these areas?

JH: We go back to Assessment, which drives what is taught. Get Assessment right, so that it requires pupils to think as you suggest they should, and the teaching will have to be done to that end. The right way to do curriculum development is to say: 'If we want X taught, what sort of assessment would help to promote that teaching?'

Neil Drury: As a group of professionals, we have spent time discussing issues around assessment and have come to the consensus that the outcomes of the current assessment regime do not reflect the true achievement of the students and encourages teaching to the test. We would like to see an assessment regime incorporating as broad and inclusive a range of assessment modes as possible (written, oral, synoptic etc). What do you think?

SH: Assessment has got into a bit of a rut, with the sense that it is assessment that drives the curriculum and the dominant practice of teaching to the test in core subjects. But there is now

change under way. The APP initiative (Assessing Pupils' Progress) is designed to support teachers in making judgements about pupils' progress through a wider range of evidence; looking not just at what they know but how they use their knowledge. Schools will now have to take more ownership of the process.

Tom Dawson: Do the KS3 national tests in Science promote appropriate challenges in teaching and learning? If not, how would you envisage change?

SH: There are developments in trialling tests across the Key Stages and – in the case of Geography – supporting the subject teaching.

JC: It is worth reflecting on the extent of changes in the examination and assessment system, designed to provide more space for teachers to do what they want to inspire and motivate pupils. From this September the six A level modules are reduced to four, with more synoptic assessment, more opportunities for extended answers, and greater variety of questions to test higher order understanding. From September 2009 new GCSEs will test greater depth and rigour of thinking. In the Diplomas there will be more space for internal assessment. Furthermore there will be lots of opportunity for schools and Universities to be involved in developing these assessment programmes.

BMC: The Science teachers certainly welcome the greater flexibility, but we are mindful of what Dr Barnes said to us about students who had been “trained but not educated”; and the five proposed Assessment Focuses in Science make no specific reference to subject knowledge or depth or rigour, even if they are implied.

Stan Labovitch: Is there going to be real change? Or is this ‘freedom’ going to entail the same huge bureaucratic burdens and constraints, as Heads play it safe and require their teachers to do the same?

JH: Lots of teachers are indeed very compliant, used to being told what to do and doing it. As a result it will be harder now to use the new freedoms creatively. It will need courage and imagination from school leadership to achieve real change.

PRESENTATIONS BY GEOGRAPHY TEACHERS

BMC: The teachers' view is clear: that though the importance of Geography as a distinctive subject is widely recognised, it is being squeezed out of the curriculum. What is to be done?

JH: The Government may take the first steps, but it needs strong leadership from the subject associations to get teachers to take ownership – in the same way as has happened in other professions.

Oliver Blond: But how do you guarantee the value of assessment?

JC: It is difficult to strike the right balance between suitably rigorous systems and a culture of excessive compliance. But school leaders do have the power, and there are freedoms they can use for the benefit of teachers and teaching.

BMC: What of the plethora of initiatives that get in the way? There is not the same freedom as in Independent Schools.

OB: The Government needs to give more encouragement to school leaders to put educational things first, to become schools where subjects matter. Instead schools are encouraged to innovate for quite other purposes: to become more popular and 'successful' by reducing challenge.

JC: School leaders have plenty of freedom to decide for themselves what they think is right for their pupils.

GH: I recognise the problems of the erosion of Geography; but it's a subject with strong popular appeal. If teachers can get their pupils' support, it will be easier for them to fight their corner.

Caroline Roberts: We are delighted that Fieldwork is recognised as a key element in the delivery of Geography; but how can more schools be encouraged to provide it in the face of obstacles like cost, the inclusion agenda, and risk assessment?

JH: The only way would be to give Fieldwork more prominence in Assessment; but the problems are real.

SH: We must not allow Risk Assessment to prevent pupils from engaging with the environment; but ultimately it is up to the Head.

Tandy Brumby: What support can QCA give to Geography when its allocation of curriculum time is under threat?

SH: We cannot control the allocation of time to subjects in particular schools; but one solution may be to combine Geography with other subjects.

Martin Roberts: The many legitimate claims on curriculum time, particularly from core subjects, inevitably put a squeeze on the humanities and the arts. So what chance does a Head of Geography realistically have?

JC: These core subjects are important, and not just because the Government says so. When you put the legitimate claims of subjects together, they amount to more than 100% of curriculum time. So there are really tough choices that have to be made, as we can't teach everything we want within the curriculum. But this doesn't mean that we should seek a solution by diluting subjects.

BMC: When the QCA give a lead on the use of curricular time, promoting overarching themes in their Big Picture document, their stated aims are so woolly that they may have the effect of squeezing out proper subjects.

Ruth Totterdell: How can the place of Geography be protected against erosion by the skills-based initiative *Learning to Learn*?

JC: Of course you can't learn to learn in a vacuum. Cross curricular themes, if done badly, turn into something mushy, lacking sharpness and rigour; but, done well, they may provide a powerful learning experience. They will support quality and rigour if monitored and refined. Subjects are still at the heart of the curriculum.

Delegate: One trouble with the thematic approach is that Geography is likely to be taught by non-specialists. You can't have Climate Change properly taught by music teachers.

Stephen Miles: The Masters qualification in Teaching and Learning, as described, won't make any difference; but a Masters in Geography Teaching or Science Teaching might make all the difference.

GH: People can still take Masters degrees in Science or any other subject. The Masters in Teaching and Learning is designed to meet particular needs in those areas. As for the overcrowded curriculum, the question that has to be faced is 'What would you take out?'

Delegate: The curriculum changes to KS3 and KS5 Geography are welcome in encouraging breadth and creativity; but why were they introduced at the same time? Isn't it too much change to cope with in one year?

JC: It was a difficult judgement to make, whether to press ahead with making the desired change, freeing up time at KS3 and giving more opportunity to display higher order skills at A level, or whether to delay or stagger them. The main changes at A level are in the A2 specifications, so have their biggest impact next year.

BMC: One can't help feeling sorry for the teachers who have to face all these changes that they do not drive.

JC: Taken as a whole, the changes were driven by the profession. But we recognise the need to work more closely with teachers.

Andy Nicholls: Are we doing enough to ensure the recruitment of specialist Science (and Geography) teachers?

GH: Record numbers of Science teachers were recruited to Initial Teacher Training last year, an increase of over 30% in Chemistry and Physics, and that was the main thrust of our recruitment drive. Numbers applying to be Geography teachers are tailing off; but vacancies remaining unfilled in the subject are still very low.

BMC: The repeated messages from this discussion have been the importance of teachers' autonomy and the centrality of subject rigour. Delegates will have greatly appreciated the constructive nature of the dialogue with the panel.

DELEGATE COMMENTS

The response of delegates to the Summer School was extremely positive. **All** delegates agreed (94% of them strongly) with the statement “I found attending the Summer School a valuable experience”; 97% of delegates agreed (51% of them strongly) that within six months this approach would be having an impact on their pupils; 95% of delegates agreed (45% of them strongly) that as a result of the course they would have new skills and confidence to be better teachers. The Science delegates reinforced the strong message of support that came from last year’s Summer School, and the enthusiastic response from the Geography delegates showed how pleased they were to have their subject included in the Summer School for the first time.

Here is a selection of comments made by delegates at the 2008 Summer School.

A longer selection can be found at

<http://www.princes-ti.org.uk/SummerSchool/2008/Testimonials/>

A superb four days; the most productive CPD in my whole career of teaching.

An inspiring, exciting week that will have impacts in the classroom.

I can’t thank the Institute enough for the chance to attend. I have wanted to be involved in subject-specific CPD for years.

I feel reinvigorated about my subject – a more passionate Geographer.

No teacher who attends can claim that support and inspiration is lacking in the teaching profession.

Subject knowledge in Science is vital, to have something to make connections with. Skills can be taught alongside a rich content.

The course has given me time to reflect on my teaching and department, and also get excited about improvements we can make.

I feel refreshed and reinvigorated in my ability to teach confidently and enrich the learning of my students.

Before going on this course, I wasn’t sure if teaching was the profession for me... Now I feel inspired and can’t wait to get back in the classroom.

It was wonderful to be treated like a professional. I have left this course knowing why I went into teaching – a love of my subject, enthusiasm, zest, and a desire to change young people’s lives. This week has allowed me to rediscover all of these.

A course that is not about targets and results but about teaching the subject that stimulates and excites us.

I feel like a flower that can now go away and bloom fully in the sun, that had previously been in the shade,

The idea of teachers furthering their subject knowledge is far more beneficial than many types of CPD.