

Heralding a new era for teaching and learning in science?

The year 2003 could go down in history as a significant milestone for teaching and learning in science. After nearly 12 months of discussions, preparation and assessment of bids, the names of the consortia to run the Science Learning Centres were announced on 16th October. Focusing on high quality continuing professional development (CPD) for teachers and technicians from all phases of education, this exciting initiative provides us all with an opportunity to make a major contribution to meet the challenges of a rapidly changing subject and the new technologies that are becoming available to support teaching and learning in science. The potential of the initiative is clear and now everyone involved is getting down to making the vision a reality. You can contribute to the process now by expressing your views and ideas on what the Science Learning Centres could, and should, do to help you enrich your teaching and inspire the learning of your pupils*.

Not surprisingly, the network of Science Learning Centres is the lead feature in this issue of *EiS*. On page 8, John Holman sets out the vision for the national Science Learning Centre and the article on pages 11–13 provides an insight into the characters of the first six regional centres. Three further regional centres will be announced in January 2004. The national Science Learning Centre, which is funded by The Wellcome Trust, has links across the UK, while the nine regional centres, supported by the DfES, will cover England.

The Science Learning Centres will have a significant role in providing a more coherent and co-ordinated approach to CPD for teachers and technicians, cultivating creative and innovative approaches to the teaching and learning of science and helping to strengthen existing provision. However, the programmes and courses available through the Science Learning Centres will need to be complemented by other organisations continuing to provide opportunities for both formal and informal CPD.

Importantly, the establishment of the Science Learning Centres provides an excellent opportunity to improve the profile of CPD and to encourage a change of attitude and behaviour towards it. Increasingly, CPD will be seen to be embedded in the culture of schools and the profession, in such a way as to ensure that nearly all teachers become fully engaged. The success of the network will depend on all the interested parties working together in true partnership and agreeing strategic and operational goals that will enable teachers and technicians to take advantage of the exciting and stimulating opportunities that will be available to them.

ASE is committed to this initiative. We contributed to the development of proposals for the centres and will now work with all the Science Learning Centres to ensure that the network is effective in meeting the needs of our teachers and technicians, both regionally and nationally.

We look forward to playing our part in enhancing and enriching teaching and learning through high quality professional development and leadership. Helping our teachers and technicians to keep up to date with an understanding of modern science and pedagogy will enable them to engage our young people in the excitement, creativity, intellectual stimulation and ethical issues of science.

The creation of the Science Learning Centres is a key element in supporting subject teaching – an issue raised by the Secretary of State for Education, Charles Clarke, personally. Although we await the outcomes of the consultation on this issue that took place in England earlier this year, we already know that keeping abreast of subject knowledge in itself is not sufficient. It is the ability and skill of teachers to use their knowledge and expertise effectively to guide and enrich the learning of their students that makes the difference. Therefore, supporting science teachers must involve helping them engage their students in dialogue about the basic principles of the discipline, as well as in debate about the latest discoveries and more topical aspects of the subject.

Throughout its history, ASE has provided support and advice, as well as offering opportunities for teachers to exchange ideas on teaching and learning in science. We will continue to do this through our range of local, regional and national meetings, providing a wide range of formal and informal activities for members and others to engage in subject-specific CPD. In looking to the future, the Association is working to strengthen its activities overall, but in particular to be fully involved, both strategically and operationally, with the Science Learning Centres.

The prospect of the Science Learning Centres is providing a critical focus for science education, and has created considerable interest within the science education community and beyond. There is widespread support for the initiative, but in order to maximise the potential for success we need to continue to work, both inside and outside science education, to involve other stakeholders including headteachers, local authorities, higher education, industry and business. For the first time in many years, there is a sense of optimism and a feeling that we can make a real difference so maybe, just maybe, 2003 will be seen as 'heralding a new era for teaching and learning in science'.

* Please send all comments and suggestions to Derek Bell at derekbell@ase.org.uk who will collate and forward them to the centres.

Derek Bell

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