

Supporting inclusive science for

special educational needs

Adrian Fenton

The ASE has been working alongside the National Association for Special Educational Needs (NASEN) looking at ways to support the inclusion of students with special educational needs in science. Adrian Fenton has been working as the ASE/NASEN Project Officer and in this article he outlines the project's developments and outcomes.

Background

The origins of this project stem back to 1999, when the ASE had registered a growing interest, with a number of enquiries from teachers working with children with special educational needs. The ASE considered ways to provide support and enable teachers to share their own expertise. Schools were contacted relating to this, and there was an SEN-focused summer edition of *EiS* (June 1999).

NASEN was approached to consider ways of working together with ASE to utilise the combined expertise

of the two organisations. This led to a DfES SEN small programmes fund bid, which was successful and meant that I could start work as the Project Officer in September 2001.

Building partnerships

Through this project, ASE and NASEN have been able to work together in close partnership. In the same way, the project is supporting both those working in mainstream and special school settings, allowing them also to share their individual expertise. Contributions have come

from a wide variety of backgrounds, including teachers, LEA advisers and representatives from SEN organisations. They have helped to provide clear guidance and defined realistic targets for the project.

An outcome of this collaboration will be a joint positional statement for science and special needs inclusion. The process will raise the profile of each organisation with the other's members, as well as providing a larger forum for the discussion of science and SEN issues than either organisation could have done independently.

Both organisations have planned publications relating to the project. This June there will be an Inclusion themed edition of *School Science Review* and an edition of *Support for Learning* (NASEN's journal covering all key stages) is planned for later in the year.

Involvement at the ASE Annual Meeting

The Annual Meeting in Liverpool provided a great opportunity to meet with others passionate about making science accessible to all. There were over 20 talks (highlighted in the *Handbook*) orientated to science and SEN. This included our session, which was attended by individuals from a wide range of backgrounds (including a representative from an RNIB school, a hearing impaired teacher with her interpreter, LEA representatives, PGCE students, as well as teachers from mainstream and special school environments). The partnership nature was highlighted by a strong presence from NASEN. On a personal

The National Association for Special Educational Needs



NASEN was formed in 1992 to create a single, powerful voice to promote equal opportunities for all learners.

NASEN aims to:

- promote the interests of those with exceptional learning needs and/or disabilities;
- provide a forum for those actively involved with exceptional learning needs and/or disabilities; and
- contribute to the formulation and development of policy in the area.

NASEN's objectives are to:

- build an effective and efficient organisation which reflects the views and aspirations of members;
- provide the means and opportunities for members to share concerns and disseminate expertise and knowledge; and
- encourage the development of policy at local, national and international level.

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level, I very much enjoyed meeting people who had already contributed to the project and the conversations the project triggered.

Opportunities to identify good practice

I have been fortunate that through this work I have met teachers who are conducting exciting science activities with a wide range of students. Just recently, I have heard from a special school which has taken the whole of Science Week off curriculum, so that the students can take part in science themed experiments, visits and activities.

Another special school is establishing a pond project using web cams to monitor activity, hence enabling those who cannot access the pond to see what is going on. This is at Charlton Park School in London, where they are catering for students with a wide range of learning, physical and medical difficulties. The science teacher has established a science laboratory and is keen to enable students to participate in activities, so that there is more 'doing' and less 'watching'.

The Middlehurst School (a special school, see photo) in Stoke on Trent took part in a Science Challenge activity as part of Science Week that was in collaboration with other local mainstream schools. Students from different schools were mixed up in teams, thus ensuring that 'every school has a winner'.

Other mainstream schools have successfully displayed the adaptation of laboratories and the teachers' own approaches, to enable a wider range of students to be part of the same learning environment. The energy and enthusiasm from some individuals has been inspiring, and has given a picture of the successes that can be achieved. It has been our intention to provide a vehicle to disseminate such good work as a result of this project. Information has been shared through the growing e-mail group and case study material may be developed and be made available on the internet. Good practice examples have also featured in articles relating to the project (such as in the RNIB journal *Visibility*).

Networking and communicating

Another aim from this project has been to invite and facilitate discussion



Year 9 students from Middlehurst School, Stoke on Trent. Carolyn Slater, the science co-ordinator at this school, has developed a lively working environment.

between those with an interest in science and SEN. The viewpoints from a wide range of perspectives have provided a realistic reflection of what teachers and individuals need in the way of support. A flyer was sent out to special schools in November, inviting their involvement. Feedback from this was positive, with individuals joining the developing e-mail group.

Other organisations have also been enthusiastic to maintain links with this project. These have included RNIB, Present (formerly the National Association for the Education of Sick Children) and the National Association for Gifted Children (NAGC). Their specific expertise has greatly enhanced the project and emphasised its position at the centre of a developing network.

To date, over 100 e-mail addresses have been added to the e-mail group and we would welcome more individuals joining.

Web developments

We have developed a website dedicated to science and special needs, bringing together up-to-date information and activity. Contents of these pages include:

- Project background and relevant policy statements;
- Published resources to support SEN and science teaching;
- Articles from publications (some downloadable);
- Weblinks; and
- E-mail group details.

The resources section is intended to be a dynamic area and we would encourage teachers to comment from

their own perspective. The pages also cement a link between the ASE and NASEN sites, providing the opportunity to inform visitors about the activities of both organisations. The Inclusive Science and Special Educational Needs site can be found at www.issen.org.uk

This project has just made a start in identifying the ways in which we can support the teaching of science to students with special educational needs. We hope that the next stage of the project will focus on the development of resources, perhaps through the production of a CD.

As with all ASE-related activities, input and comments from members are positively welcomed and will help to shape future developments.

If you have any enquiries or comments, or would like to join the e-mail group, please contact Adrian Fenton, at ASE Headquarters, by e-mail at adrianfenton@ase.org.uk or telephone 01707-283000.

Adrian Fenton is the Project Officer for the ASE/NASEN project. He worked for several years with hearing impaired students in further/higher education. Most of his science teaching experience was at Filsham Valley School in Hastings, a new school designed to facilitate the inclusion of students with a wide range of special educational needs. In addition to this project, he is working part time at Stanborough School in Welwyn Garden City, Hertfordshire.
