

Research Briefing No. 26

step-IN: Science Teaching for Inclusion

Key findings and implications for Policy Makers

The project brought together 6 science teachers from Ridings High School in Bristol. The project was financially supported by the Training and Development Agency for Schools (TDA). The teachers were from different career stages and worked together to tackle issues of inclusion in their science lessons. The issues ranged from the engagement of pupils generally in science lessons to the motivation of girls and pupils from disadvantaged backgrounds in embracing science related careers. The teachers conducted action research projects and videotaped their own lessons which then formed the basis of their reflections and analyses.

The key findings included:

1. Teachers collaborative inquiries into issues of inclusion in science lessons resulted in pupils' enhanced engagement in science lessons;
2. Teachers became more alert to factors that influenced pupils' participation in science investigations;
3. The model of professional development of teachers based on teacher ownership of professional development resulted in positive perceptions of extended learning opportunities.



The research

The research was a collaboration between teachers and researchers. There was a science education specialist (Professor Sibel Erduran), a special education specialist (Dr Filiz Polat) and a research associate (Dr Maroussia Raveaud). The teachers were from different career stages, including an NQT, an SEN teacher, a mid-career and an experienced teacher. Regular workshops were conducted between researchers and teachers whereby teachers reflected on their teaching strategies and the nature of evidence collected from their pupils.

The project outcomes include a Booklet and DVD of professional development activities as well as teaching and learning strategies.

Research design

The project was based on action research projects conducted by teachers individually as well as in collaboration. Video analysis of teaching and learning was carried out.

Further information

Erduran, S., Polat, F., & Raveaud, M. (2008). *Science teaching for promoting inclusion : Professional development through evidence-based peer collaboration*, Booklet (40pp) and DVD. Bristol: University of Bristol.

Polat, F. & Erduran, S. (2010, July). Role of Continued Professional Development Promoting Inclusion. Inclusive and Supportive Education Congress(ISEC), August, Belfast, UK.

Polat, F., Erduran, S., & Raveaud, M. (2009, July). Inclusive science teaching. Presentation at the 11th Biennial Conference on Broadening the Horizon: Recognizing, Accepting, and Embracing Differences to Make a Better World for Individuals with Special Needs, International Association of Special Education, Alicante, Spain.

Erduran, S., Polat, F., Barnes, C., & Williams, D. (2009, January). step-IN: Science Teaching for Promoting Inclusion. Presentation at the annual conference of the Association for Science Education, Reading.

Contact

Professor Sibel Erduran, Dr Filiz Polat, Dr Maria Raveaud.
Email: sibel.erduran@bris.ac.uk **Phone:** 01173314340.