What next?

I intend to continue to use the research to influence my ESD work in school, and to try to stay in touch with more research and continue to campaign, where I can, for research to be a more prominent part of a practitioner's 'everyday life'.

My aim is to extend involvement in research to ensure that it has such value in schools that time is given for teachers to read, disseminate and discuss research. Schools could then engage in using research findings, as appropriate, to inform the curriculum and other areas of school life.

About Professional User Reviews

The British Educational Research Association (BERA) recognised a need to acquaint practitioners (including policy makers) with the outcomes of research. To do so, they published Professional User Reviews, commissioned and edited by Leone Burton. They were intended to inform readers about current, reliable research in a particular educational domain such that, as practitioners, they would be stimulated to make use of research in their practices. A criterion of 'worthwhileness to practitioners' helped to decide on what was included and excluded. The audience for a PUR consists of users, practitioners and/or policy makers such as advisers, inspectors, those who advise local authorities or central government. The nature of its likely readership means that the professional user review is brief and written in an accessible style.

The seven Professional User Reviews, available to be purchased from BERA individually or as a boxed set, are:

How do we teach children to be numerate? Margaret Brown and Mike Askew

What do we know about teaching young children? Tricia David

How do we learn to become good citizens? Liam Gearon

Does ICT improve learning and teaching in schools? Steve Higgins

Connecting policy and practice: Research in Geography Education. Eleanor Rawling

Connecting research and practice: Education for Sustainable Development. Mark Rickinson and colleagues

How is music learning celebrated and developed? Graham Welch and Pauline Adams.

Author and contact details

The project was funded by BERA, the NFER and the General Teaching Council, in collaboration, and can be found at http://www.nfer.ac.uk/eur/ .

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National Teacher Research Panel

This summary was commissioned by the National Teacher **Research Panel for the Teacher Research Conference 2004,** which explored and celebrated teacher engagement in and with research. All conference materials are available at www.standards.dfes.gov.uk/ntrp

Teachers engaging with and in research: Creating a Professional User Review of Education for Sustainable Development

Introduction

This summary is written collaboratively, by a team of four. Because of this it is different and is intended to be so. We hope it encourages you to explore our work further. The objectives of this summary are:

- outdoor education engaged with an academic review of research; and
- to highlight the issues the teachers chose to research in their schools; how they did it and what they discovered.

The aims of Professional User Reviews (PURs)

Professional User Reviews are intended to inform readers about current, reliable research in particular education fields with the specific aim of encouraging practitioners to make use of research in their own practices.

Specific objectives of those engaging with the academic review of the literature related to Education for Sustainable Development Review (ESD) included the opportunity to:

- gain access to research that was relevant to their own practice;
- · inform their practice and keep up to date with innovative ideas; and
- use research as a springboard to raise the profile of ESD in the curriculum.

Who was involved?

The commissioning author of the Professional User Reviews, Leone Burton, supported a project led by Mark Rickinson at the National Foundation for Education Research (NFER) in which seven teachers engaged with the ESD literature review and undertook their own research. Their involvement in and with the review took place over a period of one academic year commencing in 2002. The teachers were all passionate about ESD and keen to learn more. Two of those present here are class teachers in primary schools with special responsibility for ESD. The third is a secondary school geography teacher.



• to find out how a researcher and four teachers of Education for Sustainable Development from primary, secondary and

Main outcomes

Individual teachers in the project reported that engagement with the research had led to:

- updating their knowledge on current issues;
- feelings of re-invigoration;
- rethinking their approaches to teaching such as refining their questioning skills;
- support in evaluating their current practice;
- adaptation of resources and schemes of work;
- a confirmation and justification of their views, adding weight to their beliefs; and
- · interest in further engagement with research.

Engaging with research

Setting the context

The Professional User Review on Education for Sustainable Development was produced by Mark Rickinson who is employed by the National Foundation for Educational Research (NFER) and was the author of a substantial academic review of environmental education for an issue of the journal Environmental Education Research, together with seven practising teachers. This collaboration provided a valuable opportunity to test ways of using academic reviews that worked for practitioners and to record these experiences as a PUR. The project was funded collaboratively by the British Educational Research Association (BERA), NFER and the General Teaching Council and can be found at http://www.nfer.ac.uk/eur/.

Those involved in engagement with the ESD literature review and then contributing to the BERA PUR were:

- Mark Rickinson, NFER
- Celia Aspinall, Buryfields Infant School,
- Andy Clark, Canon Burrows C of E Primary School
- Lara Dawson, The Ridings High School
- Sandra McLeod, Shacklewell Primary School
- Prue Poulton, EcoActive Education Centre
- Jim Rogers, Ridgeway School (Formerly Coombe Dean High School)
- Julia Sargent, Northmoor Trust for Countryside Conservation

Members of the team involved with this summary are Andy Clark, Lara Dawson and Sandra McLeod together with Leone Burton from BERA

Lara: a secondary school Geography teacher at The Ridings High School, North Bristol. I feel passionately about ESD and want to help to get it into as many areas of the curriculum as possible.		<u>Leone</u> : a researcher commissioned by BERA to produce Professional User Reviews to help make research accessible to busy, practising teachers.
	WHO?	
Andy: a year 1 teacher at a Beacon school in Tameside, Greater Manchester. I co-ordinate ECO/ESD and regularly work outside with children in our Nature Reserve.		Sandra: a year 3 teacher at an inner city primary school in Hackney, East London with responsibility for Humanities/ESD, School Grounds and Community Liaison. I have taught at this school for about 6 years.

Engaging with research

For each member of the team the exploration of research literature was a new experience. For the team leader, Mark Rickinson, the process of bringing together a team of interested practitioners and then involving them in the project was also new.

The seven teachers and Mark worked collaboratively, meeting five times at the NFER headquarters in Slough. The meetings were in April, June and November 2002, January and May 2003. Some members of the team also conducted symposiums at the BERA Annual Conferences in 2002 and 2003.

The first meeting involved getting to know each other and exploring ways forward. This was a somewhat tentative meeting but the team quickly found common ground because of our shared passion for ESD.

Between meetings, team members carried out 'homework tasks' which we set ourselves. These involved reading and making notes about areas we found of particular interest. Team members also conducted dialogues with each other and Mark electronically via email. The meetings and tasks led toward the final task, conducting a small-scale research project in our own workplaces. This step, 'Exploring connections between points of interest and your own practice', became known as the 'the magic step' because it was about both reflection on connections made with research and working out what this means for individual practice.

The findings of the teachers' research were then fed back into the Professional User Review.

By the conclusion of the project a four-step model had emerged for using research.

- 1. Identifying questions to ask of the research.
- Reading the research and identifying points of interest.
- (Steps 1 and 2 do not stand alone Step 2 can lead back to Step 1)
- 3. Exploring connections between these points and your own practice.
- 4. Reflecting on lessons learnt and the ways forward.

Case Studies

What Andy did, how he did it and what he found:

I want to make my teaching sparky and lively. I want my students to learn knowledge and skills in a way that will excite them. To be able to teach like this I think teachers themselves must be excited and sparky about their subject and their job. That is why I responded to an advertisement asking ESD teachers to get involved with research. Over a year I read and reviewed ESD research, met with seven other practitioners and tried to draw meaning from what I had found. With them I discussed my discoveries and its implications for my practice. I undertook a mini research project in which I wanted to see if, based upon reading the research, my premise that audiences were critical consumers, that they were concerned and interested in sustainable development and that perhaps I was not taking full account of this, was true. This I would share with the team and colleagues at work.

I started with a questionnaire but was not happy. What were the right questions to ask? In what way could I phrase them so as not to be leading questions? So I went back to the research, re-read and found that a better way to find out was to undertake a discussion where I allowed the audience to express their opinions and I acted as a prompt.

The results of my discussion showed that many of my audience's key areas of interest in sustainable development did indeed correspond with the research findings. But the outcome of most importance from the research project lay in how the research had helped me to construct the task itself. I found that by being engaged with research my teaching became reinvigorated. I shared what I had done through the publication of a User Review.

What next?

My colleagues agree that involvement with research should be part of in-service education because it challenges stagnation and gives renewed focus. I am looking forward to sharing my experience of involvement in research with other professionals.

What Lara did, how she did it and what she found

I saw an advert and responded to it because I feel strongly about the importance of education for sustainable development. I want to do all I can to encourage more ESD to be put onto the curriculum so children learn more about it and hopefully do more about it! I met with a group of like minded teachers and a researcher and explored the research reviewed in Mark's academic review article by reading and discussing in the group. Through this exercise I discovered areas of research that really interested me - mainly because I didn't believe it. One area of research suggested that pupils did not really understand the word 'pollution' and that they definitely could not give examples of different types of pollution. This led to me carrying out some tests on replicating the research to see if it 'rang true' with the students that I taught. It did! Now I am much more aware of regularly questioning students to test their understanding.

What next?

I have organised an opportunity to feed back on what I have learnt and experienced to my colleagues at school and I am adapting resources and schemes of work to include what I have learnt. I am keen for my colleagues to get involved with research to (a) to improve their teaching, (b) to re-motivate them about their subject and (c) to meet different and interesting people.

What Sandra did, how she did it and what she found

In the relaxed atmosphere of the summer holidays 2001, reading CEEmail, hoping to find some good news about the place of ESD in the curriculum, I noticed a small advert encouraging teachers to become involved in research exploring 'Connections' between Research and Practice in Environmental Education'. Always keen on any initiative that may raise the profile of ESD, I answered the advert and within months was entering the hitherto unknown world of research. Not only did this involve me in stimulating discussions with other teachers and researchers, but gave me the opportunity and time to gain access to the research in Mark's academic review which I would never otherwise have read. At last, here was written evidence to inform my practice and to support my beliefs in the value of ESD. This project was just what was needed, not only to press the environmental cause, but my new found cause of making research more accessible to practitioners?