

# ENVIRONMENTAL EDUCATION RESEARCH CENTRES

Directory



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**ENVIRONMENTAL EDUCATION RESEARCH  
CENTRES DIRECTORY**

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## **INTRODUCTION**

Environmental education, although acknowledged to be an essential element in any young person's education, has received comparatively little attention from the educational research community in the United Kingdom (UK). There may be several reasons for this including, perhaps, difficulty in obtaining funds and/or sponsors and a lack of emphasis on teaching and learning about the environment in the school curriculum. It is important, therefore, to facilitate communication between those research groups that are working within the field of environmental education in order to prevent duplicated effort and foster formative liaison.

The National Foundation for Educational Research (NFER) has therefore sponsored the production of this Directory which, it is hoped, will constitute a valuable resource for centres of environmental education research. It is, for this first edition, focused on centres within the United Kingdom and on **individuals and teams conducting research into environmental education for 5 to 18 year old students**. The compilers were entirely dependent on information being **volunteered** to them by research centres. It is acknowledged that this first edition will be incomplete due to some research centres declining to provide information, but the Directory has been produced in an up-datable format in order to facilitate the incorporation of additional entries at later dates.

### **Methods of data collection**

Information for the main section of the Directory dealing with environmental education research centres in the United Kingdom was collected by means of a short postal questionnaire, a copy of which is reproduced in Annexe 1. A large number of organisations/institutions were approached to provide information on their own research activities and/or to identify other research groups which may 'wish to be included' in the Directory. These additional contacts were then also sent a questionnaire.

Over 180 questionnaires were circulated across the following contacts within the UK:

- ♦ universities;
- ♦ colleges of higher education;
- ♦ educational research institutes;
- ♦ environmental organisations such as interest groups, pressure groups, co-ordinating bodies;

- ♦ teaching associations;
- ♦ interested individuals.

Details given on returned questionnaire forms were checked as far as possible and a single entry drawn up for each research centre volunteering information.

It is envisaged that the Directory will be up-dated in terms of making any amendments required by contributors and incorporating additional entries.

### **Format of the Directory**

The main section of the Directory organises information supplied from research centres into single entries of no more than two pages in length for each centre. The centres are listed in alphabetical order to facilitate searching the Directory by title of research centre.

Each entry gives details of:

- ♦ **research centre title, address, telephone number, fax number** (where given);
- ♦ **researcher(s)** - all persons mentioned with the nominated contact person listed first;
- ♦ **total size of research group** - numbers of full-time and part-time staff with staff conducting research 'in their own time' included in the part-time staff;
- ♦ **education sectors** - education sectors with which the centre's research is concerned expressed in terms of age groups i.e. under 5 years, 5-11 year olds, 12-16 year olds and post-16;
- ♦ **summary of research/interests** - an edited version of information supplied by research centres which may include details of current or recent projects;
- ♦ **publications** - references supplied by researchers which are currently available.

Two indexes are supplied, a **researcher index** and a **thematic index** to enable searching of the Directory by name of individual researchers and by broad areas of environmental education research. (Page numbers are not provided as the Directory is designed to be searched using the alphabetical listing of the research centre titles.)

All research staff mentioned by respondent research centres are included in the **researcher index** next to the title of their research centre.

Centres were asked to identify four main research themes describing the broad areas of environmental education being investigated from a structured list of 12 themes, with an option to identify 'other' themes if necessary (see Annexe 1). These four themes were then used to draw up the **thematic index** in which centres are grouped by areas of research interest.

The final section of the Directory provides a listing of co-ordinating bodies for environmental education (where appropriate) within the members of the European Union drawn up via the EURYDICE education information network.

The editors welcome both suggested amendments to existing entries and details of additional research centres. Forms for new entries may be obtained from:

The EE Research Centres Directory  
NFER  
The Mere  
Upton Park  
Slough  
Berkshire  
SL1 2DQ





## UNIVERSITY OF BATH

**Address:** School of Education  
University of Bath  
Claverton Down  
Bath BA2 7AY

**Telephone:** 0225 826826

**Fax:** 0225 826113

**Researchers to contact:** Dr W. Scott  
Mr C. Oulton

**Total size of research group:**

Full-time	
Part-time	3

**Education sectors:**

Under 5 years	
5-11 year olds	
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

The principal focus of the research is on environmental education (EE) and initial teacher education. A particular interest is to develop international links in this field. The researchers are founder members of the Association for Teacher Education in Europe (ATEE) Working Group on Environmental Education, which is currently bidding for European Commission funding to research and develop EE modules for initial teacher education across Europe.

Past work at the School of Education has focused on EE and industrial and economic understanding. A current project, **Thinking Futures**, funded by the World Wide Fund for Nature (WWF), aims to develop EE in the Post Graduate Certificate in Education (PGCE) course.

From January 1995 a new journal, *Environmental Education Research*, will be produced and edited at the University of Bath, to be published by the Carfax Publishing Company.

**Publications:**

OULTON, C.R. and SCOTT, W.A.H. (1991). 'Selling science and society short', Times Educational Supplement, No. 3931, pp.42-43.

OULTON, C.R. (1992). 'Some aspects of the development of environmental education in the UK'. And 'Environmental education and teacher education in the UK'. In: CHOI, D. (Ed). Seminar on Environmental Education and Teacher Training in Korea and UK: Summary report. Seoul: Korean Education Development Institute.

OULTON, C.R. (1992). 'Environmental education and initial teacher education'. In: Environmental education and teacher education - preparing for change and participation. Education Network for Environment and Development: Occasional Paper 3. Brighton: University of Sussex.

OULTON, C.R. and SCOTT, W.A.H. (1992). 'Environmental education and economic and industrial understanding'. In: HUTCHINS, M. and WADE, W. (Eds). Developing economic and industrial understanding in the primary school. London: Polytechnic of North London Press.

OULTON, C.R. and SCOTT, W.A.H. (1992). 'The interdependence of environmental education, economic and industrial understanding, and the other cross-curricular themes within the school curriculum'. *Environmental Education and Information*, Vol. 11, No. 1, pp.1-10.

OULTON, C. and SCOTT, W.A.H. (1992). 'Introducing an international dimension to the science curriculum'. *Journal of Biological Education*, Vol. 26, No. 2, pp.130-134.

## BEDFORD COLLEGE OF HIGHER EDUCATION

**Address:** Department of Teacher Education  
Bedford College of Higher Education  
Polhill Avenue  
Bedford MK41 9EA

**Telephone:** 0234 351671

**Fax:** 0234 217738

**Researchers to contact:** Mr J. Huckle

**Total size of research group:**

Full-time	
Part-time	1

**Education sectors:**

Under 5 years	
5-11 year olds	
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

Work focuses on curriculum development and teacher education in the area of education for sustainability. It explores the interface between environmental education and development education and is informed by critical theories of both education and political ecology.

Previous work has contributed to **What We Consume**, a module of the World Wide Fund for Nature's **Global Environmental Education Programme**, which consists of materials designed to introduce teachers and pupils to environment and development issues in a range of societies around the world.

Current work is on **Reaching Out**, the World Wide Fund for Nature's inservice teacher education programme, designed to introduce teachers to education for sustainability and provide the foundations for accredited courses at diploma and master levels.

**Publications:**

HUCKLE, J. (1990). 'Environmental education: teaching for sustainable development'. In: DUFOUR, B. (Ed). *The new social curriculum: a guide to cross-curricular themes*. Cambridge: Cambridge University Press.

HUCKLE, J. (1991). 'Education for sustainability: assessing pathways to the future'. *Australian Journal of Environmental Education*, Vol. 7, pp.43-62.

HUCKLE, J. (1993). *Our consumer society*. WWF UK Global Environmental Education Programme: *What We Consume: Unit 3*. Slough: Richmond Publishing Company.

(A full list of publications is available from the research group)

## UNIVERSITY OF BRADFORD

**Address:** European Research and Training Centre on  
Environmental Education (ERCTEE)  
Department of Environmental Science  
University of Bradford  
Richmond Road  
Bradford BD7 1DP

**Telephone:** 01274 733466

**Fax:** 01274 384231

**Researchers to contact:** Dr. W. Leal Filho

**Total size of research group:**

Full-time	9
Part-time	1

**Education sectors:**

Under 5 years	<input type="checkbox"/>
5-11 year olds	<input checked="" type="checkbox"/>
12-16 year olds	<input checked="" type="checkbox"/>
Post-16	<input type="checkbox"/>

### Summary of research/interests:

ERCTEE undertakes research on aspects of education, awareness and training in both formal and non-formal teaching. The Centre undertakes investigations into techniques, programmes and strategies which may enable the dissemination of a sense of environmental awareness both in schools and outside the formal education system.

Current research projects include:

- 1. EUROSURVEY** - a comparative study of school children's attitudes towards the environment in European countries; sponsored by the Council of Europe.
- 2. Environmental Education in the European Union;** sponsored by the Commission of the European Communities.
- 3. Environmental Education in the Commonwealth;** sponsored by the Commonwealth Secretariat.

3. **Environmental Education in the Commonwealth;** sponsored by the Commonwealth Secretariat.
4. **Environmental Education and Distance Teaching;** sponsored by the Commonwealth Secretariat.
5. **Environmental Education in Developing Countries;** ERTCEE.
6. **Environmental Education in Asia;** ERTCEE.
7. **Environmental Education and Electronic Media;** ERTCEE.

**Publications:**

LEAL FILHO, W.D.S. (1993). *Environmental Education in the Commonwealth*. Vancouver: Commonwealth of Learning.

TAHIR, F. (1993). 'Environmental education in Pakistan'. In: LEAL FILHO, W.D.S. (Ed). *Trends in Environmental Education Worldwide*. London: London Guildhall University.

LEAL FILHO, W.D.S. (1994). *Environmental Education in Island States*. Vancouver: Commonwealth of Learning.

LEAL FILHO, W.D.S. (Ed) (1994). 'Environmental education in Europe'. *Colloquium Proceedings*, Bradford, UK, 25-27 February 1994.

LEAL FILHO, W.D.S. (1994). *An Overview of Research in Environmental Education in Europe*. In: SCHLEICHER, K. (Ed). *New Dimensions in Environmental Education in Europe*. (forthcoming).

(A full list of publications is available from the research group)

## UNIVERSITY OF CAMBRIDGE

**Address:** Department of Education  
University of Cambridge  
17 Trumpington Street  
Cambridge CB2 1QA

**Telephone:** 0223 332888

**Fax:** 0223 332876

**Researchers to contact:** Mr R. Walford

**Total size of research group:**

Full-time	2
Part-time	2

**Education sectors:**

Under 5 years	<input type="checkbox"/>
5-11 year olds	<input type="checkbox"/>
12-16 year olds	<input checked="" type="checkbox"/>
Post-16	<input checked="" type="checkbox"/>

### Summary of research/interests:

The research interests of the group include:

1. The role of environmental education (EE) in the National Curriculum (with special reference to Geography).
2. The effect of formal schooling on environmental awareness in rural communities.
3. The use of simulation and role play in EE. This work has been sponsored by English Nature.
4. The use of town trails and self-motivation.



Current specific projects include:

**A Comparison of the Environmental Attitudes of British and Japanese School Children.**

**Environmental Education in Teacher Education.**

**An Investigation Into the Effects of Schooling on the Environmental Attitudes of Children in the Lacondon Forest Reserve in Mexico.**

**Publications:**

WALFORD, R. (1992). Role play and the environment. Conservation Education Matters: No. 6. Peterborough: English Nature/Nature Conservancy Council.

## CENTRE FOR EDUCATIONAL DEVELOPMENT, APPRAISAL AND RESEARCH

**Address:** University of Warwick  
Centre for Educational Development Appraisal  
and Research (CEDAR)  
Westwood Campus  
Coventry  
CV4 7AL

**Telephone:** 01203 523523

**Fax:** 01203 524472

**Researchers to contact:** Dr. C.J. Pole

**Total size of research group:** Full-time   
Part-time

**Education sectors:** Under 5 years   
5-11 year olds   
12-16 year olds   
Post-16

### Summary of research/interests:

At present CEDAR has a general interest in this area having recently conducted research on the primary science curriculum. Whilst no specific environmental project is currently being conducted at the Centre, there is enthusiasm for research in a range of areas across all phases of education and CEDAR will be actively pursuing funding for these areas.

### Publications:

(A full list of publications is available from the research group)



## UNIVERSITY OF DURHAM

**Address:** School of Education  
University of Durham  
Leazes Road  
Durham DH1 1TA

**Telephone:** 091 374 3540

**Fax:** 091 374 3506

**Researchers to contact:** Dr J. Palmer

**Total size of research group:**

Full-time	2
Part-time	

**Education sectors:**

Under 5 years	✓
5-11 year olds	✓
12-16 year olds	
Post-16	

### Summary of research/interests:

A two year project **Emergent Environmentalism: Subject knowledge and Concern for the Environment**, is being funded by the Economic and Social Research Council (ESRC). The project investigates the acquisition of environmental subject knowledge, concern for the environment and the development of this during children's first three years in school.

Specific areas of the project include:

1. Investigation of significant life experiences and formative influences which have contributed to educators' knowledge of and concern for the environment.
2. Study of the acquisition of environmental knowledge in pre-school children; examining the way in which scientific knowledge may underlie children's knowledge of the environment.

3. Monitoring the development of environmental knowledge and concern during children's first three years in school; ascertaining how incomplete or stereotypical knowledge may constrain their subsequent understanding of environmental issues.
4. Establishing a database for a longitudinal study which will monitor knowledge, concern and translation of this concern into positive action during pupils' passage through the formal education system.
5. Providing information to aid in planning of schemes of work and programmes in environmental education, so that the implementation of this subject area is underpinned by sound academic and theoretical perspectives concerned with the nature and quality of pupils' learning experiences.

**Publications:**

PALMER, J.A. (1993). 'From Santa Claus to sustainability'. *International Journal of Science Education*, Vol. 15, No. 5, pp.487-497.

## UNIVERSITY OF EAST ANGLIA

**Address:** School of Education  
University of East Anglia  
Norwich NR4 7TJ

**Telephone:** 01603 56161

**Fax:** 01603 593446

**Researchers to contact:** Prof. J. Elliott

**Total size of research group:**

Full-time	1
Part-time	8

**Education sectors:**

Under 5 years	
5-11 year olds	✓
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

Much of the research revolves around the Organisation for Economic Cooperation and Development (OECD) **Environment and School Initiatives (ENSI)** project, an international curriculum development programme sponsored by 19 member states. Researchers have been involved in the programme responsible for supporting teachers' action research into major curriculum and pedagogical issues identified over the past five years. The Centre for Applied Research in Education (CARE) has contributed to major policy analysis in six member states, and provided consultancy to National Coordinators and country-based support personnel in evaluation methods.

Other research interests at the School of Education include:

1. Teaching about 'the greenhouse effect'.
2. Understanding of environmental issues of distant environments (e.g. desert; tropical; periglacial).

3. The use of the immediate area in environmental education including local issues as a source, and the potential role of parish councils in environmental education.
4. The use of air photographs in environmental education.
5. Ideals and reality in environmental education.
6. Linkages with the National Curriculum.

**Publications:**

WRIGHT, D.R. (1990). The greenhouse effect. London: Hodder and Stoughton Educational.

WRIGHT, D.R. (1990). 'Teaching about the greenhouse effect'. Annual Review of Environmental Education, No. 4: 90-91, pp.32-34.

ELLIOTT, J. (1991). 'Environmental education in Europe: innovation, marginalisation, or assimilation?'. And 'Experiencing innovation: what makes a good case study?' In: CENTRE FOR EDUCATIONAL RESEARCH AND INNOVATION. Environment, schools and active learning. Paris: Organisation for Economic Cooperation and Development.

EBBUTT, D. (1992). Ordering the Elements: the management of environmental education across the curriculum. Godalming: World-Wide Fund (UK).

PETTIGREW, M. & SOMEKH, B. (1994). (Eds) Evaluating Innovation in Environmental Education. Paris: Organisation for Economic Cooperation and Development.

(A full list of publications is available from the research group)

## FURTHER EDUCATION UNIT

**Address:** Further Education Unit  
Citadel Place  
Tinworth Street  
London SE11 5EH

**Telephone:** 071 962 1280

**Fax:** 071 962 1266

**Researchers to contact:** Dr C. Parkin

<b>Total size of research group:</b>	Full-time	
	Part-time	2

<b>Education sectors:</b>	Under 5 years	
	5-11 year olds	
	12-16 year olds	
	Post-16	✓

### Summary of research/interests:

Research interests include:

1. Review of current activity in further education colleges.
2. Development and implementation of college environmental policies and practice.
3. Development of curriculum objectives and learning assignments.
4. Environmental education as a core theme in further education.

The Further Education Unit has carried out a survey of current practice in colleges, and undertaken commissioned development work. Guidance will be published on implementing environmental learning outcomes across courses.



**Publications:**

ALI KHAN, S. and PARKIN, C. (1992). *Colleges going green: a guide to environmental action in further education colleges*. London: Further Education Unit.

## GOLDSMITHS' COLLEGE

**Address:** Centre for Cross-Curricular Initiatives  
 Department of Educational Studies  
 Goldsmiths' College  
 New Cross  
 London SE14 6NW

**Telephone:** 0181 694 1762

**Fax:** 0181 691 6778

**Researchers to contact:** Ms. S. Inman

**Total size of research group:**

Full-time	1
Part-time	

**Education sectors:**

Under 5 years	
5-11 year olds	✓
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

Main interests are in education for sustainability as a central component of any curriculum concerned with pupils' personal and social development. The Centre promotes curriculum guidelines, materials and evaluations in this area. The Centre is also concerned with developing environmental education within initial teacher education and the professional development of teachers. Sponsors have included the World Wide Fund for Nature.

The Centre is currently carrying out a joint project with Oxfam Education looking at sustainable development within initial teacher education courses.

**Publications:**

BUCH, M. and INMAN, S. (1992). Curriculum Guidance No.1: Whole School Provision for Personal and Social Development. London: Goldsmiths' College.

BUCH, M. and INMAN, S. (1993). Curriculum Guidance No.2: Affirming Values. London: Goldsmiths' College.

(A full list of publications is available from the research group)

## GWENT COLLEGE OF HIGHER EDUCATION

**Address:** Departments of Geography, Education and  
Continued Studies  
Gwent College of Higher Education  
College Crescent  
Caerleon  
Newport NP6 1XJ

**Telephone:** 0633 430088

**Fax:** 0633 432006

**Researchers to contact:** Mr A. Harris

**Total size of research group:**

Full-time	
Part-time	2

**Education sectors:**

Under 5 years	
5-11 year olds	✓
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

The research interests are:

- 1) European Perspectives on Environmental Education within the Primary, Secondary and Higher Education sectors.
- 2) Environmental Education Networks in Wales. The aims of this project are to a) ascertain the degree to which networks of schools and environmental education resource providers have evolved in Wales; b) evaluate the effectiveness of such networks; c) suggest how such networks can be linked into a national structure comparable to the Scottish Environmental Education Council (SEEC); and d) define the proposed structure with due regard to cost and practicality.



## UNIVERSITY OF HERTFORDSHIRE

**Address:** Division of Environmental Science  
 University of Hertfordshire  
 Hatfield Campus  
 College Lane  
 Hatfield AL10 9AB

**Telephone:** 0707 284000

**Fax:** 0707 284670

**Researchers to contact:** Mrs J. Blumhof

**Total size of research group:**

Full-time	<input type="text"/>
Part-time	15

**Education sectors:**

Under 5 years	<input type="text"/>
5-11 year olds	<input type="text"/>
12-16 year olds	<input type="text"/>
Post-16	<input checked="" type="checkbox"/>

### Summary of research/interests:

An Environmental Education Action Research Group was set up in 1993 to further research and development into teaching and learning in higher education with particular reference to environmental studies/sciences. It provides a focus for a coordinated programme of action research, encouraging collaboration and experimentation based on mutual support and shared expertise.

Current teaching and learning research projects at the University of Hertfordshire Division of Environmental Sciences include:

1. Evaluation of teaching and learning resources within the Division.
2. Integrating skills and academic content in environmental studies courses.

3. The relationship between employers' needs and the provision of skills development within the Division, and environmental studies/sciences courses.
4. The development of Open Learning in environmental studies/sciences.
5. Educational issues that arise from the interdisciplinarity of environmental studies/sciences.
6. Coordination of pan-European higher education programmes.

**Publications:**

BLUMHOF, J. and PERRY, B. (1991). The European environment. Hatfield: University of Hertfordshire.

ALI KHAN, S. and BLUMHOF, J. (1992). The environment and the car. Hatfield: University of Hertfordshire.

BLUMHOF, J. (1992). The earth summit. Hatfield: University of Hertfordshire.

BLUMHOF, J. and STALLIBRASS, C. (1993). Environmental studies: learning and teaching innovations in higher education. Hatfield: University of Hertfordshire.

BROOM, C. and RILBEY, T. (Eds). (1993). Rural planning policies. Hatfield: University of Hertfordshire.

PERRY, B. and BARDON, K. (Eds). (1993). World population and food: aid and debt. Hatfield: University of Hertfordshire.

(A full list of publications is available from the research group)

## HOMERTON COLLEGE

**Address:** Daiwa Japan Primary Initiatives  
Homerton College  
Hills Road  
Cambridge CB2 2PH

**Telephone:** 0223 411141

**Fax:** 0223 414482

**Researchers to contact:** Dr M. Carr

**Total size of research group:**

Full-time	
Part-time	1

**Education sectors:**

Under 5 years	
5-11 year olds	✓
12-16 year olds	
Post-16	

### Summary of research/interests:

The **Daiwa Japan Primary Initiatives Programme** is sponsored by The Daiwa Anglo Japanese Foundation. Current work is to develop resource packs on **Japan and its People** within the various National Curriculum areas. Five resource packs have already been trialled in primary schools. One on environmental issues in Japan is now being developed using, so far as possible, first hand materials. The resource pack will include teacher guidance on the use of the materials, coordinated pupil activities, and resource stimuli including short slide sets.





## KENT CURRICULUM SERVICES AGENCY

**Address:** Kent Curriculum Services Agency  
Loose Road  
Maidstone ME15 6TL

**Telephone:** 0622 672202

**Fax:** 0622 691412

**Researchers to contact:** Ms K. Baczala

**Total size of research group:**

Full-time	
Part-time	1

**Education sectors:**

Under 5 years	✓
5-11 year olds	✓
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

Kent Curriculum Services Agency is an independent business trading within Kent County Council. The agency aims to give comprehensive support to schools in all aspects of environmental education. It runs courses, conferences and support groups, and gives advice to individuals, schools and officers of Kent County Council.

The agency is designing strategies to network support materials at school, regional and county level. The *Big Green Envelope* network is nationally recognised and the school 'auditing' methods have an international market.

**Publications:**

BACZALA, K. (1992). Towards a school policy for environmental education: an environmental audit. Walsall: National Association for Environmental Education.

'Environmental education in the county of Kent', Environmental Education: Journal of the National Association for Environmental Education, No. 40, Summer 1992, whole issue.

## KING'S COLLEGE LONDON

**Address:** Centre for Educational Studies  
King's College London  
University of London  
Cornwall House Annex  
Waterloo Road  
London SE1 8TX

**Telephone:** 071 872 3096

**Fax:** 071 872 3172

**Researchers to contact:** Mr J. Dillon

**Total size of research group:**

Full-time	2
Part-time	8

**Education sectors:**

Under 5 years	
5-11 year olds	✓
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

**Environmental Education in Teacher Education** is a joint project with Bath University to compare the effects of two different Post Graduate Certificate in Education (PGCE) courses on trainee teachers, in terms of environmental education. The research involves student teachers keeping diaries, being observed teaching and being interviewed.

The project, **Children's Knowledge, Attitudes and Behaviour**, involves a London University Overseas Research Studentship Award. It looks at the links between children's knowledge, attitudes and behaviour. Recent research includes the public's knowledge and attitudes towards nuclear power.

Research in Informal Education will include a study of the effects of a display at Chelsea Physic Garden on visitors' attitudes and behaviour, through the analysis of pre-, in- and post-visit questionnaires. A further project will look at children's learning in zoos using tape recordings of children's talk during a visit.

**Computer Based Environmental Studies (COBES)** is a European Community TEMPUS funded project. It aims to improve the quality of environmental studies courses at higher education level. Information technology is used as a vehicle to improve teaching styles. The project involves case-study work in Germany, Bulgaria, Denmark and Italy as well as the UK.

The Centre for Educational Studies has produced software for cross-curricular work which simulates the role of a British Gas environmental planner. The Centre also houses the National Environmental Database project, and Bioview, a 3D database developed to help in the analysis of fieldwork data.

### **Publications:**

LUCAS, A.M. (1991). 'Environmental education: what is it, for whom, for what purpose and how?'. In: KEINY, S. and ZOLLER, U. (Eds). *Conceptual issues in environmental education*. New York: Peter Lang Publishing.

WATSON, J.R., DILLON, J.S. and MIGUENS, M. (1991). 'Uma experienci pedagogica educacao ambiental sem fronteiras', *Aprender*, Vol. 14, pp.49-53.

LUCAS, A.M. (1992). 'Educacion ambiental para unha era nuclear', *Adaxe: Revista de estudios e experiences educativas*, Vol. 8, pp.123-136.

DILLON, J. and WATSON, R. (1993). 'Exchanging environmental data electronically: theoretical and practical issues'. In: *Computer Based Environmental Studies (COBES): Proceedings of the Second Working Conference*, Varna, Bulgaria, pp.43-51. Kiel: IPN.

DILLON, J., WATSON, R. and TOSUNOGLU, C. (1993). *Environmental chemistry*. London: Royal Society of Chemistry.

(A full list of publications is available from the research group)

## UNIVERSITY OF LANCASTER

**Address:** Faculty of Teacher Education and Training  
Charlotte Mason College  
University of Lancaster  
Ambleside  
Cumbria LA22 9BB

**Telephone:** 0539 433066

**Fax:** 0539 433626

**Researchers to contact:** Mr J. Parker  
Dr H. Prince  
Mr C. Rowley

**Total size of research group:**

Full-time	<input type="checkbox"/>
Part-time	4

**Education sectors:**

Under 5 years	<input type="checkbox"/>
5-11 year olds	✓
12-16 year olds	<input type="checkbox"/>
Post-16	<input type="checkbox"/>

### Summary of research/interests:

The research interests of the group relate to the effective teaching of environmental education (EE) within primary schools. Research starts with fundamental examination of the aims of EE, in terms of implicit and explicit values, and the translation of those aims into content and programmes of study. The balance between the cognitive, affective and physical aspects of child development, with reference to experiential modes of learning, is of equal concern. Research studies by students at Lancaster have focused on the relationship between these variables particularly with regard to approaches to teaching.

## NFER ENVIRONMENTAL EDUCATION RESEARCH CENTRES DIRECTORY

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Further research includes:

1. Examination of the relationship between aesthetic perceptions of landscape and pupils' attitudes to environmental issues.
2. The use of EE as a vehicle for teaching aspects of the mathematics curriculum at National Curriculum key stages 1 and 2.
3. The interface of EE and outdoor education, in particular its application to the 'outdoor classroom' and fieldwork.
4. A philosophical investigation of the ethics, values and rights issues arising from a proposed merger of environmental and development education.

### **Publications:**

PRINCE, H.E. and LEMMEY, R.P. (1991). 'Population dynamics...or polymorphics', *Environmental Education: Journal of the National Association for Environmental Education*, No. 37, pp.26-27.

PRINCE, H.E. (1993). 'Mathematics and environmental education', *Environmental Education: Journal of the National Association for Environmental Education*, No. 44, pp.7-8.

## LEARNING THROUGH LANDSCAPES

**Address:** Third Floor  
 Southside Offices  
 The Law Courts  
 Winchester  
 Hants.  
 SO23 9DL

**Telephone:** 01962 846258

**Fax:** 01962 869099

**Researchers to contact:** Mr. Bill Lucas

**Total size of research group:**

Full-time	6
Part-time	-

**Education sectors:**

Under 5 years	✓
5-11 year olds	✓
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

Learning Through Landscapes is interested in all aspects of school grounds development and aims to support schools which are improving the quality of their landscape as a learning environment.

Current research includes a project researching effective strategies for involving children making changes to their school grounds, i.e. participative design methodologies and a special needs project which aims to look at how school grounds can best be developed to suit the needs of children with special educational needs and to identify examples of best practice. The special needs project has received financial support from the Post Office.



**Publications:**

YOUNG, K. (1990). Using school grounds as an educational resource. Winchester: Learning Through Landscapes.

LEARNING THROUGH LANDSCAPES (1992). Making the best of your school grounds. Winchester: Learning Through Landscapes.

LEARNING THROUGH LANDSCAPES (1992). Grounds for examination: the challenge of the secondary school site. Winchester: Learning Through Landscapes.

WOOD, J. and LUCAS, W. (1993). The Esso Schoolwatch Initial Survey. Winchester: Learning Through Landscapes.

LEARNING THROUGH LANDSCAPES (1994). School grounds resource directory. Winchester: Learning Through Landscapes.

TITMAN, W. (1994). Special places: special people. Winchester: Learning Through Landscapes and Godalming: World Wide Fund for Nature (UK).

(A full list of publications is available from the research group)

## UNIVERSITY OF LIVERPOOL

**Address:** Environmental Education Research Unit  
University of Liverpool  
126 Mount Pleasant  
Liverpool L69 3BX

**Telephone:** 051 794 3275

**Fax:** 051 794 3271

**Researchers to contact:** Dr E. Boyes  
Dr M. Stanisstreet

**Total size of research group:**

Full-time	2
Part-time	

**Education sectors:**

Under 5 years	
5-11 year olds	✓
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

Research is mainly concerned with pupils' and undergraduate students' ideas about global environmental issues such as 'the greenhouse effect'; ozone layer depletion; acid rain; water pollution; marine pollution; radioactivity and radiation; rainforests; the use of animals in teaching and research; and the environmental impact of motor vehicles. The purpose of the research is to inform curriculum developers, so that effective teaching materials can be produced. Studies have been undertaken with American, English, Portuguese and Greek school children using a variety of research techniques: open-form questionnaires, pre-coded questionnaires and semi-structured interviews, the transcripts of which are subjected to concept analysis.

The broad aims of the research are to:

1. Examine, and attempt to quantify, the development of lay ideas about global environmental issues, and investigate the likely origin of these ideas.
2. Identify the conceptual frameworks upon which these ideas are based.
3. Determine public attitudes towards the costs and benefits, both personal and corporate, of addressing global environmental issues.
4. Inform practising teachers and curriculum developers of the ideas of children, the extent to which they coincide with the conventional scientific view, and the degree to which their 'erroneous' views are held within a consistent framework.

### **Publications:**

BOYES, E. and STANISSTREET, M. (1992). 'Students' perceptions of global warming', *International Journal of Environmental Studies*, Vol. 42, pp.287-300.

BOYES, E. and STANISSTREET, M. (1993). 'The greenhouse effect: children's perceptions of causes, consequences and cures', *International Journal of Science Education*, Vol. 15, No. 5, pp.531-552.

BOYES, E., STANISSTREET, M., FRANCIS, C. and QUALTER, A. (1993). 'Ideas of elementary students about reducing the greenhouse effect', *Science Education*, Vol. 77, No. 4, pp.375-392.

GREAVES, E., STANISSTREET, M., BOYES, E. and WILLIAMS, T. (1993). 'Children's ideas about rainforests', *Journal of Biological Education*, Vol. 27, No. 3, pp.189-194.

(A full list of publications is available from the research group)

## NATIONAL FOUNDATION FOR EDUCATIONAL RESEARCH

**Address:** The Mere  
Upton Park  
Slough  
SL1 2DQ

**Telephone:** 0753 574123

**Fax:** 0753 691632

**Researchers to contact:** Dr S. Stoney  
Dr B. Tomlins  
Ms K. Froud

**Total size of research group:**

Full-time	
Part-time	3

**Education sectors:**

Under 5 years	
5-11 year olds	✓
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

The NFER carries out an extensive range of research across all education sectors - and has an interest in a wide range of educational/training/employment issues.

Recently, research into aspects of environmental education has been focused on two projects:

1. **An Evaluation of the English Nature School Grants Scheme** which involved questionnaire surveys of teachers and LEA representatives, case-study visits and other visits to interested organisations (sponsored by English Nature).

2. **Environmental Education: Teaching Approaches and Students' Attitudes**, a project sponsored by the Economic and Social Research Council (ESRC) as part of the Global Environmental Change research programme. This project involves a screening questionnaire survey, case-study visits including face-to-face interviews, classroom observations and the administration of a semi-projective test to year 11 students. Professional bodies and other interested parties will also be contacted. The project aims to explore links between teaching approaches, teachers' backgrounds and students attitudes towards and behaviour in, the environment.

**Publications:**

HARRIS, S. and TOMLINS, B. (1992). Evaluation of the English Nature School Grants Scheme. Peterborough: English Nature.

HARRIS, S. and TOMLINS, B. (1994). 'Nature areas in primary schools', Primary Science Review, No.32, pp.20-23.

## UNIVERSITY OF NEWCASTLE UPON TYNE

**Address:** School of Education  
University of Newcastle upon Tyne  
St. Thomas Street  
Newcastle upon Tyne NE1 7RU

**Telephone:** 091 222 6000

**Fax:** 091 222 8170

**Researchers to contact:** Dr D. Leat

**Total size of research group:**

Full-time	<input type="checkbox"/>
Part-time	1

**Education sectors:**

Under 5 years	<input type="checkbox"/>
5-11 year olds	<input type="checkbox"/>
12-16 year olds	<input checked="" type="checkbox"/>
Post-16	<input type="checkbox"/>

### Summary of research/interests:

The aim of the research is to improve student attainment through teaching thinking within National Curriculum geography. The National Curriculum geography proposals have been analysed in order to identify the core concepts and reasoning patterns inferred. Using leads contained in the Piagetian and Vygotskyan based Cognitive Acceleration in Science Education (CASE) project and the Instrumental Enrichment Programme, trial materials are being slowly devised and tested to identify key reasoning patterns that are important in geographical attainment and how these patterns may best be developed. The assistance and cooperation of two local schools have been enlisted both for trialling and for future controlled testing for effect. As the research is being undertaken with local teachers, an action research format is being used. As yet no decision has been made on tests to verify effects.



## NORTHERN COLLEGE OF EDUCATION

**Address:** Department of Science and Technology  
Northern College of Education  
Aberdeen Campus  
Hilton Place  
Aberdeen AB9 1FA

**Telephone:** 0224 283500

**Fax:** 0224 487046

**Researchers to contact:** Mr P. Mills  
Dr P. Craig

**Total size of research group:**

Full-time	
Part-time	2

**Education sectors:**

Under 5 years	
5-11 year olds	✓
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

The main research interest lies in the use of a range of electronic probes and data logging devices to monitor environmental and micro-climate changes. Systems under trial include: LOGIT and microsensa probes; LOGIT and Hamis 'Blue Box' range of probes; Hamis EMU with 'Blue Boxes'; and Hamis DL+ with 'Blue Boxes' and with Hamis 'First Sensa' probes. In addition some work has been done constructing suitable sensors from easily obtained electronic components. The aim is to produce a practical manual for secondary teachers - mainly teachers of biology. Work has also been done on introducing primary teachers to the use of the LOGIT system.



**Publications:**

CRAIG, P. (1989). 'Inexpensive sensors for electronic datalogging: part 1', Biology Newsletter 53, pp.44-47. (Published by Northern College of Education).

CRAIG, P. (1989). 'Inexpensive sensors for electronic datalogging: part 2', Biology Newsletter 54, pp.37-42. (Published by Northern College of Education).

MILLS, P.R. (1992). Electronic data logging in ecological investigations. Aberdeen: Northern College of Education.

## UNIVERSITY OF NORTHUMBRIA AT NEWCASTLE

**Address:** Department of Education Studies  
University of Northumbria at Newcastle  
Coach Lane Campus  
Coach Lane  
Benton  
Newcastle upon Tyne NE7 7AX

**Telephone:** 0191 232 6002

**Fax:** 0191 235 8017

**Researchers to contact:** Mr S. Rawlinson  
Mrs E. Essex-Cater

**Total size of research group:** Full-time   
Part-time

**Education sectors:** Under 5 years   
5-11 year olds   
12-16 year olds   
Post-16

### Summary of research/interests:

Two research projects are currently being undertaken:

1. **The Place and Application of Fieldwork in Geography in the Context of the National Curriculum** will seek to explore the tensions that exist between the implementation of the National Curriculum and financial constraints which resulted from the Education Reform Act 1988.
2. **Developing Strategies for Implementing a 'Green' Curriculum** investigates the various strategies for raising environmental awareness in initial teacher education students. The application of environmental education to the primary classroom is a parallel theme to this work.

3. An additional area of research being carried out by S. Rawlinson is:

**Comparative environmental evaluation - policy and practise** with special reference to the UK and Canada.

## UNIVERSITY OF NOTTINGHAM

**Address:** Mobile Unit for Development Issues  
 School of Education  
 University of Nottingham  
 University Park  
 Nottingham NG7 2RD

**Telephone:** 0602 514485

**Fax:** 0602 791506

**Researchers to contact:** Ms E. Martin

**Total size of research group:**

Full-time	<input type="checkbox"/>
Part-time	<input type="checkbox" value="1"/>

**Education sectors:**

Under 5 years	<input type="checkbox"/>
5-11 year olds	<input type="checkbox"/>
12-16 year olds	<input checked="" type="checkbox"/>
Post-16	<input type="checkbox"/>

### Summary of research/interests:

The Mobile Unit for Development Issues (MUNDI) is a development education centre. Environmental work is seen as relating to development issues. In addition to working with student teachers, qualified teachers and students looking at environmental issues across cross-curricular themes, MUNDI is currently developing school packs (one in French, based on Mauritius; one on Ghana for National Curriculum geography key stages 3 and 4) both of which will touch upon environmental issues.



## NOTTINGHAM TRENT UNIVERSITY

**Address:** Centre for Environmental Education  
 Faculty of Education  
 Nottingham Trent University  
 Burton Street  
 Nottingham NG1 4BU

**Telephone:** 0602 418418

**Fax:** 0602 484266

**Researchers to contact:** Mr M. Plant

**Total size of research group:** Full-time   
 Part-time

**Education sectors:** Under 5 years   
 5-11 year olds   
 12-16 year olds   
 Post-16

### Summary of research/interests:

The diverse educational and research interests of the Centre for Environmental Education are reflected in the following aims:

1. To explore young children's perceptions of the environment.
2. To understand human responses to environmental dilemmas.
3. To evolve curriculum models for dealing with controversial environmental issues.
4. To develop teachers' understanding, skills and attitudes in relation to environmental education.

5. To identify strategies for developing environmentally responsible programmes in higher education.

Within the four main contexts for the research activities of the centre - primary education, teacher education, higher education, and human behaviour towards the environment - the following projects have been undertaken:

1. Understanding the cultural and social influences that shape very young children's perceptions of their environment.
2. Developing teachers' understanding and practice of environmental education through an action research approach.
3. **Teaching Through Controversial Issues**, a project sponsored by the British Agrochemicals Association, which aims to develop teaching materials for use by professional studies tutors using environmental themes from the agricultural industry.
4. Attempting to understand the reasons why concern for the environment has been neglected by psychology. This also traces the roots of rationalism in the sciences as a possible cause of the inability of humanity to address the solution of environmental problems.
5. The role of critical theory in the development of students' environmental responsibility. A case-study approach to establishing an agenda for the implementation of environmental education in higher education institutions.

These activities will be informed by the establishment of a database holding national and global information about the nature of environmental education research.

### **Publications:**

PLANT, M. (1992). 'Ecological principles and technology education'. Proceedings of the International Conference on Technology Education, Weimar, Germany, April 1992.

(A full list of publications is available from the research group)

## UNIVERSITY OF OXFORD

**Address:** Department of Educational Studies  
University of Oxford  
15 Norham Gardens  
Oxford OX2 6PY

**Telephone:** 0865 274024

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**Researchers to contact:** Mr G. Corney

**Total size of research group:**

Full-time	
Part-time	1

**Education sectors:**

Under 5 years	
5-11 year olds	
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

The research focuses on beginning geography teachers and their thinking and teaching about environmental issues to secondary school pupils. The aim is to describe and analyse: teachers' knowledge and understanding, beliefs, and practice during their Post Graduate Certificate in Education (PGCE) course and their first year of teaching; the ways in which their knowledge, beliefs and practice change; and the factors that influence any changes from the perspective of the beginning teachers.

The research is qualitative. Data will be collected from one complete cohort of Oxford University geography student teachers, and from detailed case studies of a selected sample of teachers. Methods of data collection include structured writing and data response, interviews, and sequences of pre-lesson interview, lesson observation, and post-lesson interview.





## UNIVERSITY OF READING

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**Fax:** 0734 318650

**Researchers to contact:** Dr C. Gayford

**Total size of research group:**

Full-time	
Part-time	2

**Education sectors:**

Under 5 years	
5-11 year olds	✓
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

**Information sources, value positions and frameworks in understanding environmental issues among teachers in schools** is sponsored by the University of Reading Research Endowment Trust Fund. The project aims to develop understanding of environmental issues. It will study the nature of this understanding, particularly in relation to scientific/technological considerations and to social/cultural/ethical considerations; and how these two relate to each other and to the curriculum. Knowledge of levels of understanding and identified models may help to explain patterns of development, in order to aid curriculum design and management.

**Flexible learning in teacher education** is in part funded by Grand Metropolitan plc. The project will look at patterns of inservice teacher education (INSET), and approaches to

pre-service training in order to meet the demands of future development in teacher education. Special emphasis is given to exploring flexible learning to meet the individual needs of particular institutions or teachers.

**Group problem-solving and decision-making as a vehicle for developing understanding, skills and attitudes among secondary school pupils.** Peer learning is explored as an effective method of encouraging pupils to focus on important environmental issues in the context of their learning in science.

**Planning, management and evaluation of environmental education across the curriculum for ages 5-16.** This work focused on the various ways in which schools begin and develop the process of planning a coordinated approach to environmental education within the curriculum, and how this subject might realistically be evaluated.

### **Publications:**

GAYFORD, C.G. (1991). 'Environmental education: a question of emphasis in the school curriculum', *Cambridge Journal of Education*, Vol. 21, No. 1, pp.73-79.

COUNCIL FOR ENVIRONMENTAL EDUCATION (1992). *Introducing environmental education. INSET for Environmental Education 5-16 Series*. Reading: Council for Environmental Education. (Series available).

GAYFORD, C.G. and DORION, C. (1992). 'Local support system for teachers and the implementation of environmental education in the primary school curriculum', *Cambridge Journal of Education*, Vol. 22, No. 2, pp.193-199.

DILLON, P.J. and BENEY, S. (1993). *Science, technology and the environment: extending teachers' understanding of the issues*. Bulmershe Monograph. Reading: University of Reading.

GAYFORD, C.G. and DORION, C. (1993). *Planning and evaluation of environmental education in the school curriculum*. Bulmershe Monograph. Reading: University of Reading.

(A full list of publications is available from the research group)

## UNIVERSITY COLLEGE OF RIPON AND YORK ST. JOHN

**Address: (1)** Department of Geography  
University College of Ripon and York St. John  
Hewith Croft  
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**Address: (2)** Department of Theology and Religious Studies  
University College of Ripon and York St. John  
College Road  
Ripon HG4 2QX

**Telephone: (1)** 0904 616755

**Telephone: (2)** 0765 602691

**Fax: (1)** 0904 612512

**Fax: (2)** 0765 600516

**Researchers to contact:** Dr H. Norris-Nicholson  
Mrs E. Bellott

<b>Total size of research group:</b>	Full-time	2
	Part-time	4

<b>Education sectors:</b>	Under 5 years	
	5-11 year olds	✓
	12-16 year olds	✓
	Post-16	✓

### Summary of research/interests:

At the University of Ripon and York St. John research interests in environment-related aspects of the curriculum are linked to initial teacher education and advanced diploma courses for primary teachers. Inservice work with local authorities in North and West

## NFER ENVIRONMENTAL EDUCATION RESEARCH CENTRES DIRECTORY

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Yorkshire has led to publications. Colleagues working across many departments share a common aim in raising professional awareness about the development of skills, understanding and attitudes through single subject and cross-curricular approaches.

The Department of Geography is involved in research into aspects of environmental, development and geographical education. It aims to inform curriculum planning and delivery of courses for both classroom generalist and subject coordinator level. Material is published in order to develop resources and disseminate curriculum experience.

Current work in the Department of Geography includes: a proposed primary geography project; and **Geography Through Stories** and **European Awareness at National Curriculum key stages 1 and 2** both funded by the Geographic Association.

The Centre for Global Education has been relocated and is now part of the Department of Geography. This will mean that experience and work can be related to older age groups. The Centre for Global Education is currently involved in a **World Studies Project**.

The aims of the Department of Theology and Religious Education are to: explore issues of value and belief which underpin environmental issues; and examine the relationship between religious education, environmental education, citizenship and economic awareness. A current project, working jointly with Traidcraft Exchange, is **Religious Education and Citizenship**, involving piloting curriculum ideas with local schools. The Department develops and publishes curriculum materials for practical classroom use and develops course material at undergraduate and postgraduate level.

### **Publications:**

BELLETT, E. and PHILBRICK, M. (1991). A different kind of enterprise. Economic Awareness in Teacher Education. Sheffield: Employment Department.

NORRIS-NICHOLSON, H. (1991). 'Through the eye of an architect: a linear approach to a locality study', Streetwise, No. 9, pp.25-28.

BELLETT, E. and PHILBRICK, M. (1992). For people and planet. Gateshead: Traidcraft Exchange.

NORRIS-NICHOLSON, H. (1993). Geography. Inspirations Series. Leamington Spa: Scholastic.

(A full list of publications is available from the research group)

## ROYAL SOCIETY FOR THE PROTECTION OF BIRDS (WALES)

**Address:** RSPB (Wales)  
Bryn Aderyn  
The Bank  
Newtown  
Powys SY16 2AB

**Telephone:** 0686 626678

**Fax:** 0686 626794

**Researchers to contact:** Ms A. Jenkins

**Total size of research group:** Full-time   
Part-time  1

**Education sectors:** Under 5 years   
5-11 year olds   
12-16 year olds   
Post-16

### Summary of research/interests:

Two research projects have been carried out by RSPB (Wales):

1. **Environmental Education in Wales**, a base-line survey of environmental education (EE) by means of a questionnaire to all state schools in Wales.
2. **Environmental Resources in Welsh Schools**, sponsored by the Countryside Commission for Wales aiming to identify materials in use, how they are used and how appropriate they are to the needs of schools. The project also aimed to identify the most appropriate publicity and distribution methods for EE materials.

Methods included structured interviews, school visits and contact with key environmental organisations.

**Publications:**

FARMER, R.J. (1991). Environmental Education in Wales. Newtown, Powys: RSPB.

FARMER, R.J. and MORGAN, G.L. (1992). Environmental Resources in Welsh Schools. Newtown, Powys: RSPB.

(A full list of publications is available from the research group)

## ST. ANDREW'S COLLEGE OF EDUCATION

**Address:** St. Andrew's College of Education  
Duntocher Road  
Bearsden  
Glasgow G61 4QA

**Telephone:** 041 943 1424

**Fax:** 041 943 0106

**Researchers to contact:** Dr J. Kieran  
Mrs M. Ker  
Mr A. Whyte  
Mrs M. Hutchison  
Mr A. Thomson

**Total size of research group:**

Full-time	<input type="checkbox"/>
Part-time	5

**Education sectors:**

Under 5 years	<input type="checkbox"/>
5-11 year olds	<input checked="" type="checkbox"/>
12-16 year olds	<input checked="" type="checkbox"/>
Post-16	<input type="checkbox"/>

### Summary of research/interests:

The project **Reappraisal of Use of School Grounds as an Educational Resource** aims to investigate children's attitudes to school landscapes, to raise awareness, and to promote change. The project will use questionnaires, discussions, and investigation by students. A final report will be produced as an agenda for change.

**The Investigation of Primary Science and Technology Project** will study work currently being done in Scottish primary schools, to see where support is needed, and to help teachers implement 5-14 Environmental Studies. The project will include questionnaires, visits, and consultations with advisers and selected schools. The aim is to produce appropriate materials.



## NFER ENVIRONMENTAL EDUCATION RESEARCH CENTRES DIRECTORY

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**Tourism in Scotland - CD Rom Materials.** A development group is working to produce CD Rom materials for pupils taking Standard Grade Geography - Study of Tourism in Scotland (with Scottish Enterprise).

**COLLEGE OF ST. MARK AND ST. JOHN**

**Address:** Department of Primary Education  
College of St. Mark and St. John  
Derriford Road  
Plymouth PL6 8BH

**Telephone:** 0752 777188

**Fax:** 0752 761120

**Researchers to contact:** Mr S. Pratchett

**Total size of research group:** Full-time   
Part-time  1

**Education sectors:** Under 5 years   
5-11 year olds   
12-16 year olds   
Post-16

**Summary of research/interests:**

**The Water/Excel Project** was funded by the Department for Education and researched the use of Microsoft Excel with primary and secondary pupils. The project focused upon National Curriculum geography and the National Curriculum Council cross-curricular theme No. 7, environmental education. The research project resulted in the publication of four units of work for use in schools:

What happens to rainwater when it hits the ground - National Curriculum key stage 2.

How do we use water in our homes' - National Curriculum key stage 2.

Flood alert - National Curriculum key stage 3.

## NFER ENVIRONMENTAL EDUCATION RESEARCH CENTRES DIRECTORY

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A study of small drainage basins in South Devon - National Curriculum key stage 4.

A further project researched the use of hardware models in the teaching of primary geography. This included models of schools and their grounds, and models exploring landscape. These approaches are linked to environmental understanding.

### **Publications:**

(A full list of publications is available from the research group)

## ST. MARY'S COLLEGE

**Address:** Research and Development Unit  
St. Mary's College  
191 Falls Road  
Belfast BT12 6FE

**Telephone:** 0232 327678

**Fax:** 0232 333719

**Researchers to contact:** Dr M. Keane  
Dr D. O'Reilly

**Total size of research group:**

Full-time	1
Part-time	2

**Education sectors:**

Under 5 years	
5-11 year olds	✓
12-16 year olds	✓
Post-16	

### Summary of research/interests:

**Education in Environmentally Sensitive Areas.** The principal aim of this research is to focus attention on major issues in the Belfast region. These areas include the Bog Meadows, Colin Glen, Forth River Valley and the South Antrim Hills. Several controversial issues dominate this environmental scene, in particular the increased exploitation of the Black Mountain for roadstone and the increasing urbanisation of the whole region. Research so far relates to: a comprehensive environmental audit of each site, with the expectancy of completion by 1995; preparation of resource material for schools in the local area.

**Development Education in the Curriculum** is a three year joint project between St. Mary's College Research and Curriculum Development Centre and Trocaire, the Catholic Agency for World Development, who sponsor the project. The project aims are:

## NER ENVIRONMENTAL EDUCATION RESEARCH CENTRES DIRECTORY

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1. To conduct a detailed review of the primary and post primary curricula in Northern Ireland from a development education perspective.
2. To identify opportunities for the use of Team Planet (a teaching pack on the environment prepared by the South Eastern Education and Library Board and Trocaire).
3. To prepare and publish necessary resource materials to support these aims and the aim of developing education generally.

### **Publications:**

O'REILLY, D. (1993). Environmental survey of the Bog Meadows. Belfast: St. Mary's Publishing Unit.

O'REILLY, D. (1993). Environmental survey of Colin Glen. Belfast: St. Mary's Publishing Unit.

O'REILLY, D. (1993). Environmental survey of Black Mountain. Belfast: St. Mary's Publishing Unit.

## SCOTTISH CONSULTATIVE COUNCIL ON THE CURRICULUM

**Address:** Scottish Consultative Council on the Curriculum  
Gardyne Road  
Broughty Ferry  
Dundee DD5 1NY

**Telephone:** 0382 455053

**Fax:** 0382 455046

**Researchers to contact:** Mr D. C. McAndrew

**Total size of research group:** Full-time   
Part-time

**Education sectors:** Under 5 years   
5-11 year olds   
12-16 year olds   
Post-16

### Summary of research/interests:

The Scottish Consultative Council on the Curriculum is currently the project manager in Scotland for the international Organisation for Economic Cooperation and Development (OECD) **Environment and School Initiative Project (ENSI)**. The project aims to: further young people's awareness of the environment; promote dynamic qualities in students; develop teachers' action-research; encourage actions which spill out from the school into the wider community; and develop networking opportunities.

ENSI will complete work and publish before the final conference in March 1994 in Braunschweig, Germany.

**Publications:**

KELLEY-LAINE, K. (1991). Environment, schools and active learning. Paris: OECD.

McANDREW, D.C. (1991). 'The OECD Environment and School Initiative Project in Scotland'. In: SCOTTISH ENVIRONMENTAL EDUCATION COUNCIL. Scottish Environmental Education 1991. Stirling: Scottish Environmental Education Council.

McANDREW, D.C. and PASCOE, I.P. (1993) OECD Environment and School Initiatives Project in Scotland: The National Report and Case Studies (Two Vols.). Stirling: Scottish Consultative Council on the Curriculum

McANDREW, D.C. and PASCOE, I.P. (1993) Environment and School Initiatives Project: Values in Environmental Education: Conference Report, Stirling, May 1993. Stirling: Scottish Consultative Council on the Curriculum

(A full list of publications is available from the research group)

## SHEFFIELD HALLAM UNIVERSITY

**Address:** Countryside and Environment Research Group  
 Sheffield Hallam University  
 Penine Building  
 Totley Campus  
 Totley  
 Sheffield S17 4AB

**Telephone:** 0742 532882

**Fax:** 0742 532881

**Researchers to contact:** Mr M. Wild

**Total size of research group:**

Full-time	6
Part-time	1

**Education sectors:**

Under 5 years	
5-11 year olds	✓
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

The research interests of the group include:

1. Sustainable development. Across the curriculum implementation of Agenda 21 - the Rio Summit's blueprint for development and the environment into the 21st Century.
2. Greening the curriculum.
3. Energy education.





## UNIVERSITY OF SOUTHAMPTON

**Address:** IT CERES  
 School of Education  
 University of Southampton  
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**Telephone:** 0703 592385

**Fax:** 0703 676711

**Researchers to contact:** Mr M. Grace  
 Mr A. Pritchard  
 Mr M. Lagadec

**Total size of research group:**

Full-time	6
Part-time	4

**Education sectors:**

Under 5 years	<input type="checkbox"/>
5-11 year olds	<input type="checkbox"/>
12-16 year olds	<input checked="" type="checkbox"/>
Post-16	<input checked="" type="checkbox"/>

### Summary of research/interests:

The Information Technology Centre for Educational Research and Training in the Environmental Sciences (IT CERES) is an University Enterprise Training Partnership (UETP) within the European Community COMETT Programme, with partners from universities in nine other European countries.

The Centre aims to promote environmental education in Europe through:

1. Identification of needs for environmental education and training in industry and education systems (including schools).

## **NFER ENVIRONMENTAL EDUCATION RESEARCH CENTRES DIRECTORY**

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2. Research and development into teaching and learning in the environmental sciences, and the potential for information technology (IT) for environmental education and training.
3. Strategies for education and training using IT, multimedia, and distance and open learning. Developing interactive teaching methodologies relevant to environmental issues at a European level.
4. Production and delivery of courses throughout Europe focusing on environmental awareness and decision-making; optimising the use of IT tools.

Projects at the Centre include:

**CERESDATA** (Accessing environmental databases). Sponsored through EC COMETT II Programme.

**ECOAUDIT** (Environmental training for the banking and finance sector). Sponsored through EC COMETT II Programme.

**MULTIMEDIA TELESCHOOL** (Distance training using computer conferencing). Sponsored through EC DELTA Programme.

**ESSO SCHOOLWATCH** (Cross-curricular environmental education database and training package for schools). Sponsored by ESSO/Learning Through Landscapes.

### **Publications:**

PRITCHARD, A.J. (1992). 'The role of distance and open learning in environmental education'. In: Proceedings of International Issues in the Environmental Sciences Conference, The Open University of the Netherlands, Heerlen, 1992.

WOOD, J., LUCAS, W. and GRACE, M.M. (1992). *Esso Schoolwatch: an Environmental Project for Primary and Secondary schools*. Winchester: Learning Through Landscapes.

GRACE, M.M. (1993). 'Schoolwatch: a national survey and database of school grounds'. In: Proceedings of Computer Based Environmental Studies, European Community TEMPUS Project, Milano, Italy, 1993.

## UNIVERSITY OF STRATHCLYDE

**Address:** International Unit  
 Faculty of Education  
 University of Strathclyde  
 Jordanhill Campus  
 Southbrae Drive  
 Glasgow G13 1PP

**Telephone:** 041 950 3477

**Fax:** 041 950 3483

**Researchers to contact:** Mr J. Dunlop  
 Mr D. MacDonald  
 Mr R. Weston  
 Mr S. Bell  
 Mr T. Milburn  
 Mr A. Robertson  
 Mr G. Fagan

**Total size of research group:** Full-time   
 Part-time

**Education sectors:** Under 5 years   
 5-11 year olds   
 12-16 year olds   
 Post-16

### Summary of research/interests:

**The Conservation and Development in Sparsely Populated Areas (CADISPA)** project was sponsored between 1988 and 1992 by the World Wide Fund for Nature (UK), and between 1992 and 1993 by DG XI of the European Commission, Brussels.

## NFER ENVIRONMENTAL EDUCATION RESEARCH CENTRES DIRECTORY

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The aims of CADISPA in its pilot phase are:

1. Establish the extent to which in selected areas of the North and West Highlands of Scotland, environmental concerns occupy low or high priority positions in relation to other areas of concern.
2. Consider ways by which innovative educational programmes might respond to this situation by creating curricular vehicles able to contextualise such concerns.
3. Utilise case-study material organised in modular and other formats which would justify wider application of the scheme's action-research model within some European Community countries.

A number of important questions arose from the pilot programme:

1. How can sparsely populated rural communities initiate dynamic development programmes that are environmentally sustainable?
2. How can the legitimate interests and needs of local populations be met without damaging valuable environmental assets?
3. What educational initiatives and what teaching or learning resources will be needed to provide communities with the skills and insights to take on active and fulfilling roles in their own development?
4. What general initiatives from outside sparsely populated areas might be necessary to provide support for programmes seen as appropriate?

These questions were taken into account when designing the CADISPA 1998/9 programme for the regions under observation: the Uists of the Outer Hebrides; the Flow Country of Caithness and Sutherland; Skye and Islay. The Scottish experience then transferred in 1989/90 to sparsely populated areas of Italy and Spain; in 1991 to Greece; and in 1992 to Portugal. The project is now able to be transferred beyond Europe.

### **Publications:**

FAGAN, G.R. and SMITH, B. (1993). CADISPA community: Community education training pack for environmental education. CADISPA Series. Godalming: World Wide Fund for Nature.

TAYLOR, K. (1993). 'Balancing act', BBC Wildlife, Vol. 11, No. 7, p.18.

(A full list of publications is available from the research group)

## UNIVERSITY OF SURREY

**Address:** Department of Psychology  
University of Surrey  
Guildford GU2 5XH

**Telephone:** 0483 509430

**Fax:** 0483 32813

**Researchers to contact:** Dr D. Uzzell  
Dr A. Rutland

**Total size of research group:**

Full-time	2
Part-time	1

**Education sectors:**

Under 5 years	
5-11 year olds	✓
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

Research in environmental education has concentrated on both formal (schools) and informal (museums) educational settings. For 16 years the Department has undertaken evaluation studies, among adults and children, of the educational effectiveness of exhibitions and other interpretative media in museums and visitor centres (Forestry Commission; Countryside Commission; Countryside Commission for Scotland). This work has developed into examining important theoretical issues including the role of socio-cognitive conflict in interpersonal learning (research in the Science Museum and the Jorvik Viking Centre), and the affective dimension of attitude and behaviour change.

Recently the Department has undertaken research studies to evaluate World Wide Fund for Nature (WWF) environmental education materials, and a WWF community-based environmental education initiative. The Department has also supplied consultancy work for the **Learning Through Landscapes Project** (funded by the Department for Education and the Countryside Commission), contributing an environmental psychology

perspective to the study of the development of school grounds as a teaching and learning resource.

Current work is in coordinating the **Children as Catalysts of Global Environmental Change** project, which is funded by the Commission of European Communities as part of the EC Environment (SEER) Programme. This 18 month study will examine the institutional means (school, museum, local government and family) through which children acquire environmental action competence, and the social-psychological processes by which that information is disseminated inter-generationally within the family and community. The study will take place in Denmark, France, Portugal and the UK, and may be extended internationally over the next few years.

Research methods for all studies include questionnaire surveys, interviews, observation, behavioural mapping, text analysis, and personal diaries.

### **Publications:**

UZZELL, D.L. (1986). 'Environmental interpretation and education', *Review of Environmental Education Developments*, Vol. 14, No. 3, pp.8-10.

UZZELL, D.L. (1989). *Heritage interpretation. Volume 1: the natural and built environment. And Volume 2: the visitor experience.* London: Belhaven Press.

UZZELL, D.L. (1992). 'Les approches socio-cognitives de l'évaluation sommative des expositions', *Publics et Musées*, Vol. 1, No. 1, pp.107-123.

UZZELL, D.L. and BLUD, L.M. (1993). 'Vikings! children's social representations of history'. In: BREAKWELL, G. and CANTER, D. (Eds). *Empirical approaches to social representations.* Oxford: Oxford University Press.

UZZELL, D.L. and BALLANTYNE, R. (forthcoming). 'Environmental meditation and interpretation: a case study of District Six, Cape Town', *Journal of Environmental Education*.

## UNIVERSITY OF SUSSEX

**Address:** Institute of Continuing and Professional  
Education  
University of Sussex  
Falmer  
Brighton BN1 9RG

**Telephone:** 0273 678260

**Fax:** 0273 678446

**Researchers to contact:** Prof. C. Lacey  
Mr R. Williams  
Mr D. Longman

**Total size of research group:**

Full-time	1
Part-time	2

**Education sectors:**

Under 5 years	<input type="checkbox"/>
5-11 year olds	<input type="checkbox"/>
12-16 year olds	<input type="checkbox"/>
Post-16	<input checked="" type="checkbox"/>

### Summary of research/interests:

Research interests of the Institute include:

1. **Diversity within Unity: An Educational Approach to the Environment of Europe**, a project sponsored by DG XI of the European Commission, Brussels and the World Wide Fund for Nature (UK).
2. **The Press as Public Educator within the Context of the Environment and Development Debate**. An examination of the mass media as an intercultural phenomenon in relation to environmental issues. The project will include a critical review of the relevant literature, surveys and interviews.



3. **Culture and the Environment.** A critical examination of their relationship which will include: an assessment of the contributions of history and cultural anthropology; and the role of the environment in the making of cultural, national, and ethnic identity.

**Publications:**

LACEY, C. and WILLIAMS, R. (Eds). (1987). Education, ecology and development. London: Kogan Page/World Wide Fund for Nature.

WILLIAMS, R. (1989). One earth, many worlds. Slough: Richmond Publishing Company.

ABRAHAM, J., LACEY, C. and WILLIAMS, R. (Eds). (1990). Deception, demonstration and debate: towards a critical environment and development education. London: Kogan Page/World Wide Fund for Nature.

(A full list of publications is available from the research group)

## SWANSEA INSTITUTE OF HIGHER EDUCATION

**Address:** Faculty of Education  
Swansea Institute of Higher Education  
Townhill Campus  
Townhill Road  
Swansea SA2 0UT

**Telephone:** 0792 203482

**Fax:** 0792 208683

**Researchers to contact:** Ms S. Lyle

**Total size of research group:**

Full-time	<input type="checkbox"/>
Part-time	2

**Education sectors:**

Under 5 years	<input type="checkbox"/>
5-11 year olds	✓
12-16 year olds	<input type="checkbox"/>
Post-16	<input type="checkbox"/>

### Summary of research/interests:

Current research interests at the Swansea Institute of Higher Education include:

1. How environmental education (EE) can be incorporated into its B.Ed. programme. This research has been supported through the **Thinking Futures** project funded by the World Wide Fund for Nature (WWF).
2. Production of materials for both classroom use and inservice teacher education (INSET). This work aims to demonstrate how EE can provide a planning tool for a thematic approach for science and geography.
3. Preparation of materials using a literature-based approach to EE and language development. Children's story books with an environmental perspective have been acquired, to enable students to plan classroom activities for National Curriculum

key stages 1 and 2. This research considers how such materials help children to explore attitudes and values towards the environment.

4. Classroom materials designed to help pupils explore the impact different value systems have on attitudes towards the environment. This work has involved pupils comparing and contrasting the values of their own society with those of indigenous peoples. These classroom materials and research papers have been published.
5. In collaboration with University College of Swansea, research into technology education and the environment. This work was commissioned by the Open University.

NB: Environmental education as a cross-curricular theme in Wales follows Advisory Paper 17 produced by the Curriculum Council for Wales.

### **Publications:**

LYLE, S. and ROBERTS, M. (1989). Rain forest child: an active learning pack for 8-13 year olds. Carmarthen: Greenlight Publications.

LYLE, S. and STERLING, S. (1991). The global environment. Harlow: Longman.

LYLE, S. and HENDLEY, D. (1993). A river child. Swansea: Swansea Institute of Higher Education.

LYLE, S. (1994). 'Teaching about indigenous people'. In: GEOGRAPHICAL ASSOCIATION. International understanding through geography. Book 2: Issues. Sheffield: Geographical Association.

(A full list of publications is available from the research group)

## TIDY BRITAIN GROUP SCHOOLS RESEARCH PROJECT

**Address:** Tidy Britain Group Schools Research Project  
Faculty of Education, Sport and Leisure  
University of Brighton  
Falmer  
Brighton BN1 9PH

**Telephone:** 0273 643117

**Fax:** 0273 643118

**Researchers to contact:** Ms C. Mares  
Mr R. Stephenson

**Total size of research group:**

Full-time	2
Part-time	

**Education sectors:**

Under 5 years	
5-11 year olds	✓
12-16 year olds	✓
Post-16	✓

### Summary of research/interests:

The aim of the Tidy Britain Group Schools Research Project is to find ways to increase environmental awareness and responsibility in pupils of all ages. The Project develops and tests teaching resources with help from teachers, advisers, inspectors, the Department of the Environment, the Welsh and Scottish offices, and industrial and environmental groups. The resources are designed to meet existing curricular needs, whilst putting emphasis on environmental education. They encourage the understanding, use and improvement of environments, and explore the impact of our lifestyles on these environments, both local and global.

Recent research has been directed to the conflict between classroom messages about the importance of environmental care, and the daily experiences of children in the school and

its site. A package of activities for use in initial or inservice teacher education has been developed in conjunction with a number of European institutes of teacher education. The aim is to help primary schools to work with children to remove negative site messages.

The international implications of environmental education have been examined in various initiatives at both school and teacher education level. The Project initiated the **Schools Links International** scheme in conjunction with Avon Local Education Authority which led to over 100 primary schools having curriculum links with schools all over the world. An **Erasmus teacher education exchange** has been established with universities in Greece, Germany and France.

**Eco-schools** is a Europe-wide project designed to encourage environmental education and action, and to reward schools and their pupils for efforts to move towards sustainability. Eco-schools pilot tests began in September 1993 in England, Scotland and Wales; it is expected to become an international project in 1994 with European Community funding.

### **Publications:**

STEPHENSON, R. and MARES, C. (Ed). (1992). The environment and tomorrow's citizen. Wigan: Tidy Britain Group.

STEPHENSON, R., JOHNSON, P., PRODGER, B. and MARES, C. (1992). Materials and the environment. Unit 1: Paper. Unit 2: Glass. Unit 3: Metals. Unit 4: Plastics. Unit 5: Waste resources. Unit 6: Slide set. Wigan: Tidy Britain Group.

STEPHENSON, R. and MARES, C. (Ed). (1993). Beating litter: a comprehensive environmental improvement programme for schools. Wigan: Tidy Britain Group.

STEPHENSON, R. and MARES, C. (Ed). (1993). The environment and tomorrow's citizen: conference report. Wigan: Tidy Britain Group.

(A full list of publications is available from the research group)

## UNIVERSITY OF WARWICK

**Address:** Department of Science Education  
University of Warwick  
Coventry CV4 7AL

**Telephone:** 0203 523220

**Fax:** 0203 523237

**Researchers to contact:** Dr P. Elliott  
Dr S. Barker  
Mr D. Bragg  
Mr B. Ellis  
Ms L. Platten

**Total size of research group:** Full-time   
Part-time

**Education sectors:** Under 5 years   
5-11 year olds   
12-16 year olds   
Post-16

### Summary of research/interests:

The current interests of the team are varied and include the following areas:

1. How children learn about the environment through the science and geography curriculum.
2. Evaluation of fieldwork in environmental education.
3. Environmental perceptions of pupils at National Curriculum key stages 2 and 3.

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4. Evaluation of environmental games and the production of a teacher's guide to environmental games. This work is in conjunction with Coventry Local Education Authority.
5. Teaching ecology to large groups.

The team is also interested in the question of how certain groups within society, but outside of mainstream education, perceive environmental issues and how they impact on their lives.

### **Publications:**

ELLIS, B. and PLATTEN, L. (1992). 'Putting the spirit of enquiry back on the map', *Education 3-13*, Vol. 20, No. 2, pp.18-23.

(A full list of publications is available from the research group)

## UNIVERSITY OF WOLVERHAMPTON

**Address:** Faculty of Education  
University of Wolverhampton  
Gorway Road  
Walsall WS1 3BD

**Telephone:** 0902 323136

**Fax:** 0922 724510

**Researchers to contact:** Dr G. Birley  
Ms R. Harrison  
Dr R. Kowalski

**Total size of research group:**

Full-time	<input type="text" value="3"/>
Part-time	<input type="text"/>

**Education sectors:**

Under 5 years	<input type="text"/>
5-11 year olds	<input type="text"/>
12-16 year olds	<input type="text"/>
Post-16	<input checked="" type="checkbox"/>

### Summary of research/interests:

Current projects include:

1. The historical development of agricultural education in the UK.
2. The role of the college farm in the delivery of the curriculum in non-advanced further education. This includes: how decisions are made and implemented regarding farm use; and the question of the farm as an educational forum.





## UNIVERSITY OF YORK

**Address:** Department of Educational Studies  
University of York  
Heslington  
York YO1 5DD

**Telephone:** 0904 433468

**Fax:** 0904 433459

**Researchers to contact:** Dr B. Campbell

**Total size of research group:** Full-time   
Part-time

**Education sectors:** Under 5 years   
5-11 year olds   
12-16 year olds   
Post-16

### Summary of research/interests:

The centre of activity and main aim is the research, development and evaluation of curriculum materials to support environmental education in secondary schools. The main focus of action is science education, with projects being carried out by members of the University of York Science Education Group. The development of materials is informed by knowledge of children's understanding of environmental concepts.

The materials are characterised by the adoption of a variety of active learning strategies and the inclusion of up-to-date ideas and information.

Current projects include:

1. **Curriculum Materials to Support an AS level course in Environmental Science.**

2. **Perceptions and Practice of Environmental Education: Student Teachers, Tutors and School Mentors.**

**Publications:**

CAMPBELL, B., HOGARTH, S. and MILLAR, R. (1990). Teaching and learning about the environment: pack 1. Hatfield: Association for Science Education.

CAMPBELL, B., HOGARTH, S. and MILLAR, R. (1990). Teaching and learning about the environment: pack 2. Hatfield: Association for Science Education.

CAMPBELL, B., HOGARTH, S. and MILLAR, R. (1991). Teaching and learning about the environment: pack 3. Hatfield: Association for Science Education.

MILLAR, R., CAMPBELL, B. and HOGARTH, S. (1992). 'Teaching and learning about the environment', Education in Science, Vol. 150, p.16.

(A full list of publications is available from the research group)

## RESEARCHER INDEX

BACZALA, K.	Kent Curriculum Services Agency
BARKER, S.	University of Warwick
BELL, S.	University of Strathclyde
BELLETT, E.	University College of Ripon and York St. John
BIRLEY, G.	University of Wolverhampton
BLUMHOF, J.	University of Hertfordshire
BOYES, E.	University of Liverpool
BRAGG, D.	University of Warwick
CAMPBELL, B.	University of York
CARR, M.	Homerton College
CORNEY, G.	University of Oxford
CRAIG, P.	Northern College of Education
DILLON, J.	King's College London
DUNLOP, J.	University of Strathclyde
ELLIOTT, J.	University of East Anglia
ELLIOTT, P.	University of Warwick
ELLIS, B.	University of Warwick
ESSEX-CATER, E.	University of Northumbria at Newcastle
FAGAN, G.	University of Strathclyde
FROUD, K.	National Foundation for Educational Research
GAYFORD, C.	University of Reading
GRACE, M.	University of Southampton
HARRIS, A.	Gwent College of Higher Education
HARRISON, R.	University of Wolverhampton
HUCKLE, J.	Bedford College of Higher Education
HUTCHISON, M.	St. Andrew's College of Education
INMAN, S.	Goldsmiths' College
JENKINS, A.	Royal Society for the Protection of Birds (Wales)
KEANE, M.	St. Mary's College
KER, M.	St. Andrew's College of Education
KIERAN, J.	St. Andrew's College of Education
KOWALSKI, R.	University of Wolverhampton
LACEY, C.	University of Sussex
LAGADEC, M.	University of Southampton
LEAL FILHO, W.	University of Bradford
LEAT, D.	University of Newcastle upon Tyne
LONGMAN, D.	University of Sussex
LUCAS, B.	Learning Through Landscapes
LYLE, S.	Swansea Institute of Higher Education
MacDONALD, D.	University of Strathclyde
MARES, C.	Tidy Britain Group Schools Research Project
MARTIN, E.	University of Nottingham
McANDREW, D.	Scottish Consultative Council on the Curriculum
MILBURN, T.	University of Strathclyde

MILLS, P.	Northern College of Education
NORRIS-NICHOLSON, H.	University of Ripon and York St. John
O'REILLY, D.	St. Mary's College
OULTON, C.	University of Bath
PALMER, J.	University of Durham
PARKER, J.	University of Lancaster
PARKIN, C.	Further Education Unit
PLANT, M.	Nottingham Trent University
PLATTEN, L.	University of Warwick
POLE, C.J.	Centre for Educational Development, Appraisal and Research
PRATCHETT, S.	College of St. Mark and St. John
PRINCE, H.	University of Lancaster
PRITCHARD, A.	University of Southampton
RAWLINSON, S.	University of Northumbria at Newcastle
ROBERTSON, A.	University of Strathclyde
ROWLEY, C.	University of Lancaster
RUTLAND, A.	University of Surrey
SCOTT, W.	University of Bath
STANISSTREET, M.	University of Liverpool
STEPHENSON, R.	Tidy Britain Group Schools' Research Project
STONE, S.	National Foundation for Educational Research
THOMSON, A.	St. Andrew's College of Education
TOMLINS, B.	National Foundation for Educational Research
UZZELL, D.	University of Surrey
WALFORD, R.	University of Cambridge
WESTON, R.	University of Strathclyde
WHYTE, A.	St. Andrew's College of Education
WILD, M.	Sheffield Hallam University
WILLIAMS, R.	University of Sussex
WRIGHT, R.	University of East Anglia

# THEMATIC INDEX

## **Implementing environmental education across the curriculum/cross-curricular**

University of Bath  
University of Cambridge  
Centre for Educational Development, Appraisal and Research  
University of East Anglia  
Further Education Unit  
Goldsmiths' College  
Gwent College of Higher Education  
University of Hertfordshire  
Kent Curriculum Services Agency  
University of Lancaster  
Learning Through Landscapes  
University of Nottingham  
National Foundation for Educational Research  
Nottingham Trent University  
Royal Society for the Protection of Birds (Wales)  
University of Reading  
University College of Ripon and York St. John  
St. Andrew's College of Education  
St. Mary's College  
Scottish Consultative Council on the Curriculum  
Sheffield Hallam University  
Swansea Institute of Higher Education

## **Development of curriculum resources**

Bedford College of Higher Education  
Further Education Unit  
Goldsmiths' College  
University of Hertfordshire  
Homerton College  
King's College London  
Royal Society for the Protection of Birds (Wales)  
University of Newcastle upon Tyne  
University of Nottingham  
University College of Ripon and York St. John  
St. Andrew's College of Education  
College of St. Mark and St. John  
St. Mary's College  
University of Strathclyde  
Swansea Institute of Higher Education  
Tidy Britain Group Schools Research Project  
University of Warwick  
University of York

### **Initial teacher training/youth worker training**

University of Bath  
University of Cambridge  
University of Durham  
Goldsmiths' College  
Gwent College of Higher Education  
King's College London  
University of Lancaster  
University of Newcastle upon Tyne  
Northern College of Education  
University of Northumbria at Newcastle  
Nottingham Trent University  
University of Oxford  
University College of Ripon and York St. John  
University of Sussex  
Tidy Britain Group Schools Research Project  
University of Warwick

### **INSET teacher education/professional development**

University of Bath  
Bedford College of Higher Education  
University of Bradford  
Centre for Educational Development, Appriaisal and Research  
University of East Anglia  
Goldsmiths' College  
Kent Curriculum Services Agency  
University of Northumbria at Newcastle  
University of Nottingham  
University of Reading  
Scottish Consultative Council on the Curriculum  
Sheffield Hallam University  
University of Southampton  
University of Sussex

### **Pupil values concerning and attitudes towards the environment**

University of Bath  
University of Bradford  
University of Cambridge  
University of Durham  
University of East Anglia  
University of Lancaster  
Learning Through Landscapes  
University of Liverpool  
National Foundation for Educational Research  
University of Reading  
University College of Ripon and York St. John  
St. Mary's College  
Scottish Consultative Council on the Curriculum  
University of Strathclyde  
University of Surrey  
Swansea Institute of Higher Education

## **Teacher attitudes towards the environment**

University of Bradford  
University of Durham  
Gwent College of Higher Education  
University of Oxford  
University of Reading

## **Influencing pupils'/teachers' behaviour**

University of Bradford  
Learning Through Landscapes  
National Foundation for Educational Research  
Scottish Consultative Council on the Curriculum  
University of Strathclyde  
University of Surrey  
Tidy Britain Group Schools Research Project  
University of York

## **'Greening' issues/institutional responsibility**

Further Education Unit  
Homerton College  
Kent Curriculum Services Agency  
Nottingham Trent University  
St. Andrew's College of Education  
Sheffield Hallam University  
Tidy Britain Group Schools Research Project

## **Pupils' knowledge and appreciation of international environmental issues**

Bedford College of Higher Education  
Centre for Educational Development, Appraisal and Research  
University of Durham  
University of East Anglia  
Gwent College of Higher Education  
Homerton College  
King's College London  
University of Liverpool  
University of Nottingham  
University of Southampton  
University of Strathclyde  
University of Surrey  
University of Sussex  
University of York



## **Using the 'outdoor classroom'/nature areas/fieldwork**

Kent Curriculum Services Agency  
King's College London  
University of Lancaster  
Learning Through Landscapes  
Northern College of Education  
University of Northumbria at Newcastle  
St. Mary's College  
Sheffield Hallam University  
University of Surrey  
University of Warwick  
University of Wolverhampton

## **Effectiveness of teaching styles**

University of East Anglia  
National Foundation for Educational Research  
University of Oxford  
University of Southampton  
University of Wolverhampton

## **Teaching about the environment through the science and/or geography curriculum**

Bedford College of Higher Education  
University of Cambridge  
Centre for Educational Development, Appraisal and Research  
Homerton College  
University of Newcastle upon Tyne  
Northern College of Education  
University of Northumbria at Newcastle  
University of Oxford  
St. Andrew's College of Education  
College of St. Mark and St. John  
Swansea Institute of Higher Education  
University of Warwick  
University of York

## **Culture, media and the environment**

University of Sussex

## **Environmental monitoring**

Northern College of Education

**Global issues in environmental education**

University of East Anglia  
University of Liverpool

**Information technology and environmental education**

University of Southampton

**Landscaping in special schools**

Learning Through Landscapes

**National environmental education policies**

University of East Anglia

**Participative environmental design with children**

Learning Through Landscapes

**Teaching of controversial environmental issues**

Nottingham Trent University

## **CO-ORDINATING ORGANISATIONS FOR ENVIRONMENTAL EDUCATION IN THE EUROPEAN UNION**

The EURYDICE education information network facilitates the exchange of information about the education policy and systems of the various Member States of the EU. Via EPIC Europe, the EURYDICE Unit for England, Wales and Northern Ireland based at NFER, the EURYDICE units in each of the other Member States were asked for the contact details of any national co-ordinating body for environmental education. Their responses are detailed below.

### **BELGIUM (Dutch-speaking community)**

de Heer Frans Van Esch  
Permanente Commissie voor Milieu-educatie  
Ambrossteenweg 144  
1981 Zemst-Hofstade  
Belgium

This commission's aims include co-ordinating information on existing or planned initiatives in environmental education, stimulating and supporting individual initiatives in schools and formulating advice on environmental education in the secondary education sector.

### **BELGIUM (German-speaking community)**

The only umbrella body for environmental education centres is the Permanent Environmental Education Committee for Secondary Education, which was established within the Education Department in 1990. This committee co-ordinates the various environmental education initiatives in the different educational networks.

### **BELGIUM (French-speaking community)**

Centre recherche et éducation pour la conservation de la nature  
rue des Ecoles,21  
5670 Vierves-sur-Viroin  
Belgium

This centre covers teaching and learning for the primary and secondary sectors.

## **DENMARK**

There is no single environmental education organisation but the following three bodies are active in the area of teaching and learning about the environment.

Forum for miljøundervisning  
Sekretariatet  
Vestervangskolen  
Vester Gesingvej 28  
6715 Esbjerg N  
Denmark

This forum for environmental education is an interest group made up of member schools. It publishes a periodical and teaching materials.

Biologforbundet  
C/o Mr Finn Sandby Hansen (Chairman)  
Bellisvej 6  
Havnbjerg  
6430 Nordborg  
Denmark

Tel: 010 45 74 45 08 85

This is a voluntary professional association for biology teachers. It publishes a periodical and teaching materials.

Geografforbundet  
C/o Mrs Birte Bjørn  
Maglekærvej 44  
2680 Solrød Strand  
Denmark

Tel: 010 45 56 14 70 14

This is a voluntary professional association for geography teachers. It publishes a periodical and teaching materials.

## **FRANCE**

Union National des Centres Permanents d'Initiation à l'Environnement (CPIE)  
2, rue de Washington  
75008 Paris  
France

Tel: 010 33 1 45 63 99 48

The National Union of Permanent Centres for Environmental Education runs courses in environmental awareness for pupils and teachers covering broad 'discovery themes'.

Education et Nature  
Domaine de Pestinchières  
34730 Prades-le-lez  
France

Tel: 010 33 67 59 54 62  
Fax: 010 33 67 59 55 22

This is an exchange network - about a hundred associations work with representatives from regional centres on teaching materials for exchanges and individual institution projects.

## **GERMANY**

Deutsche Gesellschaft für Umwelterziehung  
C/o Günter Eulefeld  
Zur Heide 33  
DW-2206  
Sparrieshoop  
Germany

The German Association for Environmental Education.

## **GREECE**

There is no national council for environmental education in Greece. The Ministry of Education runs environmental educational programmes in primary and secondary schools.

## **IRELAND**

The Environmental Information Service (ENFO)  
17 St Andrews Street  
Dublin 2  
Ireland

Tel: 010 353 1 6793144  
Fax: 010 353 1 6795204

ENFO is the environmental information service established by the government to promote knowledge and care of the environment by providing access to wide-ranging and authoritative information by means of a query-answering service, information leaflets, reference library with computerised database, educational materials, video lending and video-viewing facilities, exhibitions and lectures.

## **ITALY**

There is no national council for environmental education in Italy. The following department of the Italian Ministry of Education is responsible for co-ordination of environmental education:

C/o Romana di Febo  
Ufficio Studi, Bilancio e Programmazione  
Ministero della Pubblica Istruzione  
Via Ippolito Nievo 35  
00100 Roma  
Italy

## **LUXEMBOURG**

Institut Supérieur d'Etude et de Recherches Pédagogiques (ISERP)  
B.P. 2  
7220 Walferdange  
Luxembourg

Tel: 010 35 333 4201

This institute promotes the teaching of environmental sciences, has a library and develops teaching and learning materials.

Centre d'Ecologie de Hollenfels  
Château  
7435  
Hollenfels  
Luxembourg

Tel: 010 35 309443

This centre has a mission to contribute to the development, stimulation and co-ordination of teaching in the domain of environmental education.

## **NETHERLANDS**

Landelijk Steunpunt Natuur - en Milieu-educatie  
Damrak 28-30  
1012 LJ Amsterdam  
Netherlands

Tel: 010 31 20 62 61716  
Fax: 010 31 20 82 08049

The National Centre for Science and Environmental Education represents 44 national and provincial organisations. The Centre has an overview of science and environmental

education practice in the Netherlands, produces inventories of educational material on science and the environment, and publishes various thematic catalogues. There is an automated lesson bank and a courses, training, and research archive. The library contains background information and educational material on science and the environment plus a tape and record collection

Stichting Milieu-Educatie  
F.C. Dondersstraat 17  
P.O. Box 13030  
3507 LA Utrecht  
Netherlands

Tel: 010 31 30 71 3734

The SME (Environment Education Foundation) develops and produces educational material for primary and secondary education, vocational education and the apprenticeship system.

## **PORTUGAL**

There is no national council for environmental education in Portugal but education is part of the remit for the following organisation:

Instituto de Promoção Ambiental (IPAMB)  
Rua Carlos Testa No.1-1<sup>o</sup>  
1000 Lisbon  
Portugal

Tel: 010 351 356 2001  
Fax: 010 351 356 1102

The Environmental Promotion Institute (formerly the National Environment Institute) aims to encourage active involvement of the public in environmental decision-making by:

- promoting training and information initiatives in conjunction with public and private bodies;
- helping integrate environmental education into the education system;
- providing technical and financial support for environmental protection associations;
- providing technical and financial support for publications and other forms of information.

## **SPAIN**

There is no national council for environmental education in Spain but the following working parties have some responsibility for the area:

Alberto Pardo Diaz  
Asesor de Educación Ambiental  
Subdirección General de Programas Experimentales  
C/General Oraa 55, 3a planta  
28006 Madrid  
Spain

Tel: 010 341 562 0608  
Fax: 010 341 563 1842

This working party on Environmental Education for State Education Administrations co-ordinates the development of environmental education as a cross-curricular subject and co-ordinates resources in environmental education in different communities, as well as overseeing the implementation of EU directives.

Susana Calvo Roy  
Dirección General de Political Ambientas  
Secretaria de Estado para las Politicas del Agua y del Medio Ambiente  
C/Paseo de la Castellana 67, 4a planta, Despacho A451  
28071 Madrid  
Spain

Tel: 010 341 553 1600 Ext.2940  
Fax: 010 341 554 6277

This working party on environmental education for government departments co-ordinates environmental information and education campaigns conducted by the state secretariat and the environmental councils of the Communities. It also oversees the implementation of EU directives.

## **UNITED KINGDOM**

Council for Environmental Education (CEE)  
University of Reading  
Berkshire  
RG1 5AQ  
United Kingdom

Tel: (44) (0) 734 756061  
Fax: (44) (0) 734 756264

The CEE has over 80 member organisations and acts as a co-ordinating body across England and Wales. It also liases with central and local government, business and industry and other organisations and individuals. The CEE aims to :

- influence and develop policy at all levels as it relates to environmental education;
- influence, develop and spread good practice in environmental education;
- increase the effectiveness and coherence of the environmental education movement.



The CEE has a national resource centre, organises seminars and conferences, advises on policy development, provides support through training and co-ordination and researches and publishes reviews, briefings, news sheets, news releases and resource sheets on issues and developments within the field of environmental education. The CEE has substantial research interests and co-sponsors research publications.

Scottish Environmental Education Council (SEEC)  
C/o Environmental Science Department  
University of Stirling  
FK9 4LA  
Scotland

Tel: (44) (0) 786 467867

Fax: (44) (0) 786 467864

The SEEC is an independent networking organisation promoting and developing environmental education policy and practice in Scotland. Its role is to promote education for sustainability, developing the knowledge, skills, values and attitudes for people to change their lifestyles in order to contribute to the securing of the future of the environment and its life-support systems. The SEEC produces four newsletters per year and has substantial research interests and co-sponsors research publications.

**ANNEXE 1: Entry data collection form**

**NATIONAL FOUNDATION FOR EDUCATIONAL RESEARCH**  
The Mere, Upton Park, Slough, Berkshire, SL1 2DQ.  
Tel: (0753) 574123

**ENVIRONMENTAL EDUCATION RESEARCH CENTRES DIRECTORY**

**This Directory is intended to cover individuals and teams conducting research into environmental education for 5 to 18 year old students. Related fields such as psychology and sociology may be included if they are of actual or potential significance to environmental education.**

**PLEASE TYPE OR USE BLOCK CAPITALS**

---

1. Name, full postal address and telephone number(s) of institution(s) where research is/will be carried out:

Institution .....

Department .....

Address .....

.....

.....

Telephone Number ..... Fax Number .....

2. Name and address of contact to whom any future correspondence should be sent (if different from above):

.....

.....

.....

Telephone Number ..... Fax Number .....

3. Name(s) of principal researcher(s) to whom any enquiries may be addressed - please give initials and surname with title (eg Prof, Dr, Mr, Ms etc):

.....

.....

.....

**ANNEXE 1: Entry data collection form**

4. Number of researchers involved in environmental education research:

Full-time  Part-time

5. Please tick up to **four** of the following 'themes' which indicate the broad area(s) of environmental education research carried out in your institution. Four ticked boxes **only** will be used to assist indexing and searching the directory; so, if you have more than four please number in order of importance i.e. 1 being the most important:

- |                                                                                        |                                                                                                         |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> implementing EE across the curriculum/cross-curricular        | <input type="checkbox"/> 'greening' issues/institutional responsibility                                 |
| <input type="checkbox"/> development of curriculum resources                           | <input type="checkbox"/> pupils' knowledge and appreciation of international environmental issues       |
| <input type="checkbox"/> initial teacher training/youth worker training                | <input type="checkbox"/> using the 'outdoor classroom'/ nature areas/fieldwork                          |
| <input type="checkbox"/> INSET/professional development                                | <input type="checkbox"/> effectiveness of teaching styles                                               |
| <input type="checkbox"/> pupil values concerning and attitudes towards the environment | <input type="checkbox"/> teaching about the environment through the science and/or geography curriculum |
| <input type="checkbox"/> teacher attitudes towards the environment                     | <input type="checkbox"/> other, please specify                                                          |
| <input type="checkbox"/> influencing pupils'/teachers' behaviour                       | .....                                                                                                   |
|                                                                                        | .....                                                                                                   |
|                                                                                        | .....                                                                                                   |
|                                                                                        | .....                                                                                                   |
|                                                                                        | .....                                                                                                   |

6. Please indicate the education sector(s) in which your research is based:

- under five years
- 5-11 year olds
- 12-16 year olds
- post-16 (up to 18 year olds)



**ANNEXE 1: Entry data collection form**

9. Published material (if none please say so). Please give up to six key and recent publications that have arisen from the research. Give details of:  
**Book:** author, title, publisher and date.  
**Journal:** author(s), title of article, title of journal, volume and/or part number, date, page numbers:

10. Please give brief details below of up to three additional research groups you feel may wish to be included in this directory:

1.
2.
3.

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**PLEASE RETURN THIS QUESTIONNAIRE WITHIN THREE WEEKS TO:**

**DR BARBARA TOMLINS  
NFER  
EE RESEARCH CENTRES DIRECTORY  
THE MERE  
UPTON PARK  
SLOUGH  
BERKSHIRE  
SL1 2DQ**