RESEARCH ON ESD

SESSION B

ANALYSIS OF SELECTED ESD RESEARCH STUDIES AND PROJECTS

CASE 1

CONNECTING RESEARCH AND PRACTICE: EDUCATION FOR SUSTAINABLE DEVELOPMENT

This is a set of case studies which attempt to connect research and practice in relation to ESD. The studies are compiled by 7 researchers from UK primary, secondary schools and outdoor community settings. The researchers were practising teachers recruited by the UK based National Foundation for Educational Research (NFER). The research publication includes case studies of research-practice links relating to school and community, it includes a “Four step guidance” process to help practitioners make use of research in their practice, a summary of the project’s key messages and implications and links to other sources of information concerning ESD and ESD research. The project will be of interest to teachers, practitioner researchers, teacher educators, curriculum developers, policy makers. The starting point for the project was an academic review of research on environmental learning covering 100 research studies. This constituted a “user review” which is a document that originates from an academic review of studies but which is devised and written by practitioners working together. The process of the review is shown in Figure 1.

TITLES OF THE SEVEN ESD PROJECT CASE STUDIES.

Case Study 1
Using research to support the Development of ESD in the Primary School Curriculum
Case Study 2
Using research to raise questions about one’s own ESD Teaching Practices
Case Study 3
Using research to inform the Development of a waste action project in a Primary school.
Case Study 4
Using research to investigate Year 9 students’ understanding of Environmental Issues

Case Study 5
Using research to inform the Teaching of a Year 9 Geography Class studying Environmental Issues

Case Study 6
Using research to investigate the factual correctness of ESD Teaching at an Outdoor Centre

Case Study 7
Using research to reflect on ESD Work undertaken in and with Local Schools

FIGURE 1

THE “USER REVIEW” PROCESS

STAGE 1 SELECTION FROM ESD RESEARCH

Synthesis into

STAGE 2 REVIEW OF THE ABOVE

Used as a basis for

STAGE 3 THE RESEARCH PROJECT

Reference
http://www.nfer.ac.uk
COMMENT

The above research uses essentially an Action Research model although the 7 case studies entitled above, explore variations of the model by using case study, ethnography and in few cases participatory inquiry as part of the methodology and research design. There is little in the way of a survey/empirical approach.

CASE 2

EDUCATION FOR SUSTAINABLE DEVELOPMENT: AN EMPIRICAL STUDY OF THE TENSIONS AND CHALLENGES FACED BY GEOGRAPHY STUDENT TEACHERS

Abstract

This is a qualitative study of the challenges identified by geography student teachers in their learning to teach about education for sustainable development in English secondary schools. The student teachers were participating in a development and research study in the context of an established initial teacher education programme, consisting of contributions from school based and university partners. Data for a cohort of 19 postgraduate student teachers, from open proformas and follow up interviews, were analysed to identify what the student teachers themselves saw as the challenges. Three main areas of challenge were identified and are discussed in depth, namely challenges related to the complexity of subject matter, to teaching and learning approaches and strategies, and to differences between student teachers’ beliefs about education for sustainable development and the context for their teaching. A conclusion draws on the nature of these challenges to suggest appropriate student teacher learning outcomes and activities for consideration by teacher educators.

Reference
COMMENT
In the above study, the methodologies included are a mix of pre and post proformas, observation and recording, discussion and interviews. It did not use questionnaires nevertheless, the research model can be categorised as a survey reflecting the value of this model in exploring the challenges faced by teachers, trainees, school mentors and teacher educators in developing ESD as part of a school curriculum subject like Geography.

CASE 3

ESD AND INFORMATION SYSTEMS : 4 CASE STUDIES

CASE STUDY 1

SUSTAINABLE DEVELOPMENT LEARNING THROUGH RESEARCH AND ROLE PLAY
AUTHOR E. BURD

CASE STUDY 2

SUSTROUP (SUSTAINABLE DEVELOPMENT STUDENT TEAM
REACH OUT PROJECT
AUTHOR: L HUMPHRIES

CASE STUDY 3

CASE STUDY OF AN APPROACH TO EMBEDDING SUSTAINABLE DEVELOPMENT IN THE CURRICULUM IN THE INFORMATION AND COMPUTER SCIENCES
AUTHOR: N GORDON

CASE STUDY 4

ESD CASE STUDY FOR HEA ICSCENTRE: EMBEDDING SUSTAINABILITY INTO THE IS CURRICULUM
AUTHOR: N. PLANT
Reference:
http://www.ics.ics.heacademy.ac.uk/resources/supp_learning/esd/casestudies.shtml
COMMENT

The above 4 studies use a case study approach in the field of Information Systems and Computing (ISC). They have been carried out at the Higher Education Academy, an UK based Institution for Higher Education research and development. The four case studies provide a wide and interesting example of linking ESD to the field of Information Technology. They adopt the case study model to inform other researchers who are in the area of linking ISC to ESD.

CASE 4

SUSTAINABLE DEVELOPMENT IN ACTION: A CURRICULUM PLANNING GUIDE FOR SCHOOLS

This project and its publication provides Guidelines for Teachers of all subjects in Primary and secondary schools in England and Wales. The publication is about how to build in the principles of sustainable development into the existing school curriculum. It includes what sustainable is, practical activities for staff school governors and young people. There are a selection of case studies from schools where sustainable development is already in action.

COMMENT

The Guide uses a case study model as a major vehicle to inform “would be” teachers, existing teachers and teacher educators, of how ESD concepts and processes can be embedded into the curriculum.

References

QCA, Sustainable Development in action: A curriculum planning guide for schools. UK Government Publication Qualifications and Curriculum Authority (QCA) 2009
QCA Orderline www.qca.org.uk/orderline
Email address: orderline@qca.org.uk
Order reference QCA/08/4039
CASE 5

PLANNING A SUSTAINABLE SCHOOL: DRIVING SCHOOL IMPROVEMENT THROUGH SUSTAINABLE DEVELOPMENT

In the last few years, schools in England and Wales approached the UK Government through the Department of Children, Schools and Families, DCFS (the UK equivalent of an MoE), about what levels of performance they should aim for when addressing sustainable development in the context of School improvement.

The DCSF has devised a National Framework which outlines a comprehensive approach to sustainable development. This framework cites eight doorways to be crossed by 2020. The doorways include: (1) Food and drink, (2) Energy and water, (3) Travel and traffic, (4) Purchasing and waste, (5) Buildings and grounds, (6) Inclusion and participation, (7) Local well being, (8) Global dimension.

Related to this National Framework is a school improvement plan citing three cycles, Planning, Action and Reflection. Linked to each cycle a key question was asked What are we trying to achieve? (Planning cycle). How do we lead? (Action Cycle). How well are we achieving our aims? (Reflection Cycle).

It is in the above context that a project called Planning a Sustainable School: Driving school improvement through sustainable development was devised and published in 2009.

The outcome of the project is a guide for schools which contains thirteen participatory activities that help to bridge the gap between the recommendations of the National Framework for Sustainable Schools and school improvement planning. The activities are intended to help plan, monitor and evaluate progress in the attainment of a sustainable school.
COMMENT

The project carried over several years used mainly qualitative methods of inquiry which would be reminiscent of the studies mentioned in CASE 1. As this project is in its infancy, it is likely that various research models mentioned in Section A will be used to evaluate its effectiveness.

References

DCSF, *Planning a Sustainable School: Driving school improvement through sustainable development*, DCSF, UK, 2009

[www.teachernet.gov.uk/sustainableschools](http://www.teachernet.gov.uk/sustainableschools)