

DEVELOPING FIELD COURSES FOR SCHOOLS PAST, PRESENT AND FUTURE

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ABSTRACT

The Field Studies Council just managed to edge into existence ahead of one of the greatest educational reforms of this century—the 1944 Education Act. Over its fifty years in business it successfully adapted to the demands of GCE A-level and O-level examinations, CSE, GCSE and now National Curriculum and GNVQ; but more radical changes are under way and further evolution will be necessary. Academic excellence, fieldwork prowess, and environmental awareness remain the essential ingredients for field courses designed for schools and colleges but, unless well-spiced with current curriculum know-how and assessment expertise, FSC could lose sight of the objective and miss the target of ‘Environmental Understanding for All’ in the twenty-first century.

INTRODUCTION

The Field Studies Council (FSC), brain child of Francis Butler, just managed to edge into existence ahead of one of the greatest educational reforms of this century—the 1944 Education Act. This Act, the creation of another Butler (R. A. B. Butler) introduced three types of Secondary Schools: the Technical, Modern and Grammar Schools, of which only the last two developed to any extent. New schools with different requirements brought in new examinations. The fifties saw the demise of the ‘table d’hôte’ School Certificate and the introduction of the ‘à la carte’ Ordinary and Advanced level General Certificate of Education (GCE) examinations administered by a range of university-based GCE boards.

CHANGING SCHOOLS—CHANGING EXAMINATIONS

New and different syllabuses were needed to meet the requirements of the new advanced level examination. In biology and geography, some of the syllabuses were forward-looking enough to require that students undertook field studies. Students on these courses provided the ‘bread and butter’ for the Field Studies Council during its formative years. In a recent article, Purchon (1993) wrote “It is no mean achievement that, in the thirty years between 1957 and 1987, more than 258,000 biology and geography A-level students attended courses run by the Field Studies Council.”

School and Field Centre, between them, worked out tailor-made courses to suit particular needs in the light of the specific A-level syllabus that the pupils were studying. In those days, there were few constraints on what might be studied, on the methodology

*SEAC was abolished under the 1993 Education Act and was replaced by the School Curriculum and Assessment Authority, on 1st October 1993. Patricia Wilson writes in a personal capacity and the views expressed are hers alone.

to be used or, indeed, on the mode of assessment. Times, however, were changing in the pre-16 arena which was to have a considerable impact on the 'laissez faire' approach to post-16 field studies.

In the early sixties, demand from the new and developing secondary modern schools for assessment more suited to their pupils' needs led to the establishment of a new examination: the Certificate of Secondary Education (CSE). This examination, administered by regional groups of examination boards, allowed a great deal of experimentation, particularly in teacher assessment. Teachers began to develop their own methods of assessing pupils, particularly those of middle or low ability. Indeed, the author developed a successful CSE geology syllabus based on fieldwork carried out from the school's own field centre in the Brecon Forest. From this field-based course, students went on to higher education, ultimately to become geologists in their own right. More significantly, the discipline of writing syllabuses, expressing aims and assessment objectives in precise terms, creating criteria against which to mark pupils' work etc., was beginning to filter into O-level syllabuses as well. Even some A-level courses began to require practical and individual fieldwork set against specific objectives and to be marked against prescribed criteria.

Of particular note was the Schools Council 16–19 Geography project which moved A-level geography significantly away from the standard two or three written papers and an optional practical project firmly into the area of precise assessment objectives and marking criteria. The Field Studies Council played its part in this new development, working with the project particularly at Slapton Ley Field Centre; developing fieldwork booklets and associated 16–19 courses which continue to this day, both at Slapton and several other Centres.

A-level biology syllabuses also moved towards teacher assessment and individual project work, notably through the work of the University of Cambridge Local Examination Syndicate (UCLES) and the University of London Schools Examination Board (ULSEB), the latter working with staff at the Drapers' Field Centre, Rhyd-y-creuau.

THE ADVENT OF GCSE AND THE NATIONAL CURRICULUM AND THEIR IMPACT ON A-LEVEL EXAMINATIONS

The mid-nineties will herald changes to all A-level biology and geography syllabuses originating, once again, from changes in the pre-16 field. The main thrust has come with two important educational reforms of the eighties: the introduction of the General Certificate of Secondary Education (GCSE) and the National Curriculum (Department of Education and Science/Welsh Office, 1985).

The introduction of GCSE by the then Secretary of State for Education, Sir Keith Joseph, brought in the first major change. Both the GCE O-level and the CSE examinations were abolished and an examination was introduced that was designed to allow all pupils the opportunity to show 'what they knew, understood and could do'—positive achievement was the catch-phrase of the new examination. However, it was the 'strings' attached to the development of the new GCSE syllabuses that were important. All had to conform to explicit criteria; assessment objectives had to be stated (and demonstrably met) in the written papers and coursework; criteria for individual study had to be agreed; and all science and geography syllabuses had a minimum of 20% teacher-assessed coursework (Department of Education and Science/Welsh Office, 1991).

This was good news for field-based subjects and, coupled with a criterion which required ‘awareness of economic, political, social and economic factors relevant to the subject should be encouraged whenever appropriate’, the scene was set (in theory) for many pupils to be introduced to the delights of fieldwork. From the teachers’ point of view, they had to become accustomed to working with agreed criteria against which to mark such coursework. Close liaison, between Field Centre tutor and the School, was vital if such requirements were to be met. Sadly, in some cases, this did not happen which disadvantaged students. Fortunately, in GCSE, this was retrievable because of the nature of the syllabus requirements and the school-based course. In the next reform that will not be possible.

Ten subjects, amongst them science (Core) and geography (Foundation) were made subject to statutory Orders; their content laid out in programmes of study for each of four key stages, which correspond to the ages 5–7, 7–11, 11–14 and 14–16. The assessment of the content was set out in attainment targets (ATs); four for science and five for geography, each divided into ten levels, with statements of attainment (assessment objectives) for each level clearly stated.

Science in the National Curriculum

Science attainment target 1 (Sc1) is about scientific investigation; pupils are expected to ask questions, predict, hypothesise, observe, measure etc., but not at random. Each activity is prescribed by law. For example, pupils working towards level 3 ‘*observe closely and quantify by measuring using appropriate instruments*’ whilst those working towards level 7 have to be able to ‘*manipulate and take account of the relative effect of two or more independent variables*’ (Department of Education and Science/Welsh Office, 1991).

The other three attainment targets are content-based, rather than process-led. For example, pupils at level 6 in AT2 *Life and Living Processes*, have to ‘*know the ways in which living organisms are adapted to survive in their natural environments*’ or in AT3 at level 6 ‘*understand the physical differences between solid, liquid and gas in simple particle terms*’.

Geography in the National Curriculum

In the geography Order, the key Stage 4 programmes of study says, in paragraph 1, ‘*They (the pupils) should support their enquiry with fieldwork and the use of secondary resources ... they should become competent in fieldwork techniques and develop skills in interpreting and analysing data from statistics etc.*’ (Department of Education and Science, 1991).

In attainment target 1 (Gg 1): *geographical skills*, pupils have to ‘*measure and record weather using scientific instruments and procedures*’ at level 6. Or, ‘*use a large sketch map to locate their own position and features outside the classroom*’ at level 3.

In attainment target 3 (Gg 3); *physical geography*, there are opportunities to study a range of landforms at Key Stage 3—‘*river channels and river valleys*’ or ‘*coasts*’ and, at Key Stage 4, ‘*highland glaciation*’ or ‘*limestone with Karst features*—some of which are easily accessible from all FSC Centres. The study of river basin hydrology as well as the effects of weathering, erosion and soil formation are also included. Many such topics have been neglected, in recent years, in favour of courses orientated more towards the human aspects of the subject and this attainment target is an attempt to restore the balance. Finally, attainment target 5 (Gg 5); *environmental geography*, affords a range of opportunities for environmental understanding. At level 3, for example, pupils have to ‘*describe an activity to improve the local environment or a place they have visited*’ or, with Centres in

the National Parks in mind, at level 7 'explain how some leisure activities can harm the very environments that are the source of attraction'.

From this short summary, it is possible to see the enormous changes which have taken place in what has to be taught statutorily in science and geography in state schools. This work has to be assessed by statutory tests at the ages of 7, 11, 14 and 16 in science; and of 14† and 16 in geography. Every statement must be recorded in order to provide evidence of the level achieved towards a particular attainment target at the end of the key stage. (see footnote added in proof†)

IMPLICATIONS FOR THE DEVELOPMENT OF FIELD COURSES FOR SCHOOLS

Following the introduction of national curriculum science and geography, it is clear to all parties: teachers, pupils, parents, governors and Field Centres, what has to be taught, when and at what level. This presents a variety of opportunities for developing a totally new range of field courses and for forging quite different links between Field Centres and schools.

Several Field Centres have developed links with primary and middle schools, presenting interesting and diverse courses for younger children. The National Curriculum provides additional opportunities for Centres to work with local schools which have little sophisticated equipment (not to mention basics such as maps and aerial photographs). Weather recording, pond work and simple nature trails offer the chance to meet many of the Programme of Study requirements in both science and geography that schools are finding difficult to resource themselves.

In geography, primary children have to study 'a locality in the United Kingdom which offers a contrast to their local area'. This should be 'a small area with distinctive features' and comparable in size to the immediate vicinity of the school. The opportunities for Centres to become the 'other locality' for a group of primary schools in another part of, say, Wales or Yorkshire has exciting possibilities. A group of Wakefield teachers are currently exploring Malham Tarn Field Centre with this in mind.

For the first time, earth science has been included in the science curriculum, so that courses, targetted either at teachers or at their charges, and using local materials, have distinct possibilities. At Key Stage 3, which is focused on 11–14 year-olds, the opportunities for in-service training courses (INSET) for non-specialist teachers on how they could use the environment to access science attainment targets 1 and 3 (which include earth science), or attainment target G3; *physical geography*, are legion.

Independent schools do not have to follow the National Curriculum, but many are choosing to do so, with little or no support. Some Field Centres have already run INSET courses at Key Stage 3, and these offer enormous scope for development and a new clientele.

New GCSEs, based on the National Curriculum, are coming on stream; science in 1994 and geography in 1996†. Both subjects require coursework. The opportunities, particularly for developing teachers' process skills to meet the new criteria (as well as for learning about assessment techniques), could provide the raw material for new courses.

The National Curriculum should stimulate an increased demand for fieldwork but, in order to tap this potential, FSC will need to develop different strategies for advertising, and for working with 'new' schools.

†As this article went to press, significant changes are likely as a consequence of the Dearing Review, due in December 1993. Key Stage 3 tests and Key Stage 4 GCSE's have now been postponed in Geography.

The National Curriculum has introduced radical changes in school teachers' administration. Field Centre staff will have to work even more closely with those teachers to ensure that their courses are appropriate for the pupils and that opportunities are provided for recording those pupils' achievements throughout the course. Equally, as the 1993 Education Act reduces the scope of Local Education Authorities, the importance of direct links between FSC and schools increases if the array of courses on offer are to reach potential clients.

The effects of the National Curriculum are yet to be felt in post-16 education, although the administrative changes which took sixth-form colleges out of LEA control in April 1993 are bound to have an impact. A and AS level examinations are due to change significantly from 1994 onwards, as syllabuses are developed to meet the new principles with geography, geology and biology all becoming subject to a maximum of 20% teacher-assessed coursework. Subject cores are being developed which will govern about 70% of AS-level syllabuses and 35% of A-level syllabuses. Procedures designed to bring greater consistency between the practices of the various GCE Boards may well bring in significant changes to coursework management, marking and administration.

Field courses designed specifically to meet these new A/AS syllabuses, with their cores and limited coursework, will have to be rather different from current practice. It appears to be a "Watch this space" situation at present but, obviously, any new developments cannot be ignored. Equally, the vocational equivalents to A-level, introduced in the May 1991 Government White Paper, the General National Vocational Qualification (GNVQ), with units including leisure and tourism, need to be monitored as potential for new course development. Science comes on stream in late 1993.

WHITHER THE FIELD STUDIES COUNCIL?

Virginia Purchon quotes Francis Bunker, writing in 1943, when he said that he "envisaged secondary school boys and girls, and undergraduates, attending hostels for field studies run by a warden who was an experienced naturalist trained in field observation". She went on to say "adaptation and response to consumer needs are the key to a success" and quoted Tony Thomas (FSC's present Director) as saying "FSC still sees itself as pioneering, but also becoming more politically aware". It is the last phrase which is the key to the next fifty years; academic excellence, fieldwork prowess, environmental awareness are still the ingredients needed to run good field courses for schools and colleges. However, without being well spiced with 5-19 curriculum know-how and assessment expertise FSC could well lose sight of the objective and miss the target of 'Environmental Understanding for All' in the twenty-first century.

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