

# Conference Abstracts

Abstracts of Papers delivered at BERA Annual Conference

1981

## Symposium A - ACCOUNTABILITY AND SELF-EVALUATION

### The response of schools and teachers to Local Authority initiatives on self-evaluation - practice and theory

- Gordon Elliot, University of Hull.

There has been a recent growth in Local Authority initiatives for monitoring schools. By 1981, at least 21 schemes had been produced on the theme Keeping the School under Review (ILEA 1977) or variations on it. These had been linked to a greater or lesser extent to inspection of schools by local authority staff. This writer's review of these events were summarised in two reports, which provided a base-line from which

- a) the continuation of the movement is being monitored
- b) the details of the movement and its effects on schools/teachers is being examined through a series of case studies.

These can now be considered in more detail and their characteristics related to a typology of approaches to the evaluation of teaching suggested in the second report (Gordon Elliot, 1981). This analysis will lead to a further appraisal of the theoretical framework, reviewing its adequacy as a diagnostic classificatory instrument and suggesting possible modifications.

### How Good is my School? School-based Evaluation and Public Accountability.

- Peter Burnhill, David Raffe and Penelope Weston, University of Edinburgh.

In collaboration with the authors a group of Headteachers have been using the Scottish Education Data Archive in order to cast light on whether their school is doing as well as it should. Attention has focussed on two issues - public accountability and self-evaluation.

The first of these two papers describes the progress of the Headteachers' Group and outlines some of the issues that the Group has discussed. One of the main conclusions is that any attempt to develop public accountability will prove sterile unless it is preceded and matched by a progressive system of self-evaluation freely undertaken by the school as a professional body.

The second paper is more quantitative in nature. Reference is made to other studies of schools and school systems, but the principal focus is on the production of 'schools accounts' for internal and external consumption. Several methods of summarising and displaying school performance measures are presented and evaluated. Attention is also given to the variety of statistical techniques that attempt adjustment of a school's performance measures in the light of pupil intake. A high premium is placed upon the ease with which appropriate statistical information might be interpreted by parents, teachers, administrators and research workers.

### Cheshire Curriculum Reappraisal Group: A process of School Evaluation.

- Joan May, Senior Adviser, Cheshire I. e. a.

A brief account of the background to the establishment of the project; a description of the strategies and means used to develop the process; an evaluation of the process to date together with an indication of changes made to the management and use of the project, and the future developments envisaged.

### Explorations in the expediency of school-based forms of curriculum review and analysis.

- David Halpin, University of Lancaster.

Arising largely as a consequence of general disquiet about the nature of the secondary curriculum, coupled with increased demands that schools become more accountable, a significant number of local authorities have initiated school-based programmes for curriculum review. This paper develops a formative evaluation of such programmes. In particular, the paper addresses the following issues:

- (1) whose vocabulary and frame of reference should prevail in curriculum review?
- (2) how expedient is it to use L. E. A. advisers as linking agencies for in-school curriculum review?
- (3) what features in the overall design of an in-school evaluation scheme are more likely to elicit a favourable response from teachers?

Discussion of these issues is supported by evidence derived from a recently completed case-study of one north of England secondary comprehensive school's efforts to adopt and implement a set of proposals on whole curriculum review commended by its local authority.

### The Self-Evaluating Teacher. A response from the classroom.

- Neil Wilson, Spurley Hey High School, Manchester.

From the outset the focus of self-evaluation in this country has been the institution rather than the individual. The teacher, however, cannot be neglected nor ignored in any scheme that attempts to monitor schools. Three strands will be given special emphasis:

- a) The implication of self-evaluation for the teacher
- b) The problems of data collection
- c) A possible framework for development.

## Institutional Self-Evaluation

- Mary James, The Open University.

In a recent article Helen Simons (forthcoming) argues that the main rationale for self-evaluation must lie in its potential to improve professional practice in schools. This notion will be explored with reference to issues such as strategies for change, notions of INSET, and the relationship between the development of teachers and improvement in schools. Practical examples of self-evaluations will be referred to where appropriate.

Finally, although Simons suggests that school self-evaluation should be insulated, at least temporarily from the demands of accountability, it will be argued that this strategy can be interpreted as a mode of professional accountability, which seeks public confidence in institutionalized professional procedures. Whether this notion can satisfy current accountability demands will, however, remain an open question.

## LEA Initiated Self-Evaluation

- Phil Clift, The Open University.

Elliott (1980) reports that, by July 1980, 69 LEAs had been involved in discussions on the topic of institutional Self-Evaluation, and that in 21 of these, the discussions had already led to the production of agreed guide-lines. The schemes generally incorporate a booklet of prompting questions, which are highly similar between LEAs. A conceptual analysis of these questions will be presented in terms of Stake's (1967) framework. The various schemes specify the uses to be made of these questions, and the answers they elicit. A conceptual analysis of the schemes will be presented, and its applicability illustrated.

The issues which arise from the use by schools of LEA initiated schemes for self-evaluation e.g. their validity, reliability, intrusiveness, access will be discussed along with the perceptions of LEA staff (Advisers, Administrators) mainly responsible for the development of nine of them. Reference will be made to a case-study of the preparation of a report on self-evaluation by a primary school.

## Externally Audited Self-evaluation

- Robert McCormick, The Open University.

The East Sussex Accountability Project (ESAP, 1979) put forward the idea of external auditing as a policy option for school-based accounting, however they admitted that there was little experience upon which to base any judgement of this approach. This paper will explore two examples taken from abroad (U.S.A. and Australia) which provide contrasting models for external auditing. Each basically involves schools carrying out an internal evaluation and a team of outsiders then coming in to check this and carry out any additional evaluation they think fit. The paper will draw upon these examples to form a framework for an external audit, and will explore some of the issues that result.

## Symposium B - ORGANISATION AND IMPACT OF RESEARCH

### Survey of Educational Researchers in Britain: Key Findings and Policy Issues

- Professor Richard Whitfield, University of Aston.

This S. S. R. C. - sponsored survey has sought to describe the training, career structure and professional qualifications of educational researchers practising or trained in Britain during the period 1972 - 1977. Two pilot studies used 500 researchers; a main postal questionnaire supplied data from a sample of 1800 individuals; and nearly 50 interviews were conducted, mainly with employers and directors of researchers. The major methodological problems concerned population definition, population isolation and sampling.

The presentation of findings will concentrate on: nature of training and academic background of researchers, sources of finance during training, attitudes towards research and job satisfaction of researchers, and career mobility. Some implications of the findings will be raised, such as funding for educational research and its distribution, dissemination and impact of research, and relations between trainers and potential employers of educational researchers.

### Independent Evaluation - Myth or Reality?

- Geoff Hughes, King Alfred's College.

This paper will explore those extrinsic and intrinsic factors which tend to constrain the freedom of project evaluators in any attempt at providing an independent evaluation of the educational scene.

Suggestions regarding illuminative evaluation will be taken as the starting point of the paper; the problems encountered and insights gained as the Directory of the independent evaluation of the Avon Resources for Learning Project (1974-78 and 1978-80) will be used to illustrate the theme.

No attempt will be made to provide a single conclusive answer to the question in the title but its contents will serve to indicate the constraints under which researchers work and the pitfalls they may avoid by skilful negotiation.

### Evaluation research and educational policy.

- Professor John Eggleston, University of Keele.

After a brief comment on the complex contexts of evaluation and policy-making the paper asks what are we doing with our main engines of evaluation - official and unofficial. Four areas are explored - the questions asked, the strategies adopted, the acceptability of the activity and the utilization of the answers. In the light of the exploration six suggestions for better liaison of evaluators and their clientele are offered.

### Institutional Policy and Educational Research in the Public Sector

- Peter Chambers, Bradford College.

The relationship of research to teaching in higher education public sector institutions is examined through a comparison of formal policy statements with the records of research undertaken by staff and students. The results reveal an absence of conceptual frameworks and a lack of consistency in the shaping of a policy for educational research in public sector institutions. This deficiency appears to spring from a failure to clarify the nature and functioning of research, from a separation of research and teaching and from an absence of a research tradition in schools and teacher training institutions. It is suggested that what is required is greater commitment to applied research in education, acknowledgement of the sensitizing influence of research and the formulation of institutional research policies consistent with the academic goals of the institution.

### Educational Research, Social Policy and the British Disease.

- Edgar Wilson, Crewe + Alsager College.

A consideration of educational research as a means of basing the formulation of national policy on a more secure foundation of knowledge and of monitoring and evaluating the implementation of educational policies as a means of achieving social aims. Industry, technology and the 'British Disease' are taken as a focus; and two main aspects are considered: education for industry, and the social and educational implications of new technology. The relationship of educational research to wider social contexts is explored with the emphasis on educational research as an effective agency of social policy and planning.

### Symposium C - DEVELOPMENTS IN EDUCATIONAL ASSESSMENT

#### Grade monitoring in the Open University - can statistics help?

- Phil Armitage, The Open University.

There is understandable concern, supported by reliability studies, that tutors involved in correspondence marking apply differing criteria and standards of grading. Students may then be arbitrarily advantaged or disadvantaged - but how can the effects be isolated without multiple marking? At the Open University, a method of grade monitoring has been developed to measure effects such as "apparent bias". However the system may expose more problems than it solves - are the effects fixed, how should the results be used, and what standards are really at issue?

#### What Price Classroom Autonomy: Two Cautionary Tales

- Patricia Broadfoot, Westhill College.

This paper takes up the relatively neglected area of the relationship between educational assessment procedures and teachers' classroom practice. The analysis is based on material gathered from two very different educational systems - those of France and England - in the course of a recently completed

study funded by the S.S.R.C. Accountability Panel. The paper will explore the similarities and differences between teachers' perceptions of the constraints upon them in the two countries. In particular, it focuses upon how such perceptions are both produced by and in turn help to determine, the nature and importance of assessment procedures as a basis for the control of educational practice.

#### Methods for the Estimation of test score reliability using instrumental variables

- Russell Ecob, University of London.

A distinction is made between "internal" and "external" methods of estimation of reliability of test scores; the internal methods relying on the analyses of responses to individual test items and the external methods using the relationship between the total test scores and another variable which may or may not be the same test.

Internal methods of reliability estimation are reviewed and an external method using instrumental variable estimation suggested which extends the possible set of variables to be used for estimation to variables having different true scores.

Taking data from the National Child Development Study the reliability of test scores of reading and mathematics attainment at 11 years is estimated using a number of different instrumental variables including tests and teacher ratings on a variety of attainments at different ages as well as social class.

Recommendations are given on appropriate choices of variables to be used as instrumental variables in this context and an indication is given of the reliability of the estimates produced.

#### Sex differences in assessment: a pilot case-study

- Jan Harding and Patricia Murphy, Chelsea College.

After conducting a survey of research findings about 'sex bias' of assessment techniques, with particular reference to science, it was decided to look at this problem more closely. The majority of previous research in the area considered examination board data which confounded mode of assessment technique with subject content. The study proposed to look at A.P.U. 'science concept-free' items where the main variable was mode of assessment. Previous evidence and research findings from the A.P.U. science trials suggest that other variables - sex, age, general ability, school type - should be taken into account. The inter-correlations that were to be considered had implications for the size and nature of the sample and the analysis method chosen, both of which had inherent problems - the need for a 48-cell matrix and the presence of two dependent variables. The need for a pilot case-study became apparent. The case-study involves pupils of 13 and 15 years of age in single sex and mixed comprehensive schools.

### The Effects of Examination Syllabus Objectives on Teachers

- Anne Jones, University of Southampton.

This paper will present some preliminary findings from a project that is exploring the role of the stated objectives of a C. S. E. Biology examination, in relation to the way that teachers prepare students for that examination and the type of assessments that are made. The findings at this stage will largely be based on a number of in-depth structured interviews with biology teachers.

### College Profiles - Using Information Derived from Examinations for Curriculum Evaluation

- Nick Stratton, City and Guilds of London Institute.

College profiles present the mean scores of students from the school or college on each question or topic on the examination. In addition normative information about the performance of all candidates on the question or topic is provided. Where an examination tests identifiable syllabus topics or skills, college profiles can provide useful feedback to assist curriculum planning.

### Sex Differences in Objective Test Performance

- Roger Murphy, University of Southampton.

The choice of techniques used in making educational assessments may have a crucial influence on the relative performance of various groups of individuals. It has, for example, been suggested that males may obtain better results when objective (multiple-choice) tests are employed rather than other methods of assessment. This particular possibility is explored in relation to a selection of sixteen G. C. E. examinations, which were selected for the investigation because they all included both objective tests and other methods of assessment in their overall schemes of assessment.

The results from the majority of these examinations supported the hypothesis that males perform better, in relation to females, on objective tests than they do on other forms of assessment. The influence of different levels of written language skills on the performance of males and females on certain non-objective forms of assessment is put forward as a possible explanation for these results. The implications of the findings for those wanting to avoid bias, when constructing schemes of assessment, are also discussed.

### Advanced level Scientists and their Measured Achievement

- Charles Newbould, Test Development and Research Unit, Cambridge.

This paper considers the results of all Advanced level candidates who took Biology, Chemistry and Physics in one summer's examination. A factor analysis indicates a strong general factor although minor subject-specific ones may be recovered. When analysed by the sexes (who are approximately equal in number for

this triple) a strong sex-by-form interaction emerged, which suggests that a candidate's measured attainment was very much a function of the battery of tests used. Whilst no examination may ever be "sex-fair" these results suggest one possible reason for the continued drift of girls away from science.

#### How should we grade public examinations?

- Desmond L. Nuttall, The Open University.

Public examination results at 16+ and 18+ are almost invariably reported as a single grade for each subject, thus concealing variation in performance among the components (e.g. active and receptive skills in languages). How might profiles of performance be developed? Are narrowly defined profiles a pre-condition for the specification of criteria for the award of each grade, as desired by the DES for the common system of examining at 16+? What are the implications of profiles and grade criteria for the design of examinations? Would profiles and grade criteria ease or exacerbate the problems of comparability?

#### School-based Examining and the Professional Development of Teachers

Harry Torrance, University of East Anglia.

Currently, at a time of unprecedented support for school-based curriculum development and school-centred in-service training, it is surprising that more is not made of the potential contribution of Mode III examining to the professional development of teachers. Its appeal, in practice, is not as great as might have been anticipated. Arguments in favour of Mode III usually centre on the idea of liberating teachers from external constraints, but it is precisely the same point which generates criticism: without external constraints what will happen to standards?

But it could be argued that school-based assessment procedures contribute to the raising of academic standards in schools. Various teachers and examiners have suggested that the experience of designing Mode III exams for C.S.E. and G.C.E. and negotiating their passage through subject panels has been important for the professional development of those who took part.

This paper will review the literature of Mode III, paying particular attention to these claims, and describe the work of a current Schools Council-funded project, based at C.A.R.E., which seeks to 'take the temperature' of Mode III by examining the views of teachers engaged in Mode III work in two L.E.As.

#### Testing in schools: Practices, purposes, motivations and beliefs.

- Robert Wood and Caroline Gipps, University of London  
Institute of Education.

Has accountability through testing taken root in this country? When tests are expected to satisfy diverse needs, not all of which can be met, what are the consequences? What do L.E.A. officers mean when they refer to testing as a 'management tool'? Some educational psychologists maintain that with test results to hand they can enter schools and engage in more fruitful discussions



with teachers than might otherwise have been the case. Do teachers see it that way? Ultimately, are test scores, being 'harder', given more weight than teachers' judgements? Is testing controversial only when there are no bigger issues? What connections are there between cuts and testing policies? Testing can be characterised as one of those activities which are at once commonplace and poorly understood. What are the consequences in practice?

The project team will provide some provisional answers to these and other questions, drawing on eighteen months' work which has included interviews and discussions with teachers, head teachers and local authority officers.

#### Differential performance in a C.S.E. biology examination paper

- Roland Hoste, University of Stirling.

A series of structured questions in a C.S.E. biology examination were broken down into their component items. The items have been examined for difficulty using analysis of variance (using an independent measure of biological ability, sex and question combination as factors), and analysis of covariance (using biological ability as covariate). Significant differences occur between the sexes, and candidates who opted for certain combinations of questions for particular items. These differences are discussed in terms of the social and educational context, and previous work in this field.

#### Distortion of weighting when different elements of an assessment are combined

- Gareth Pierce, Welsh Joint Education Committee.

The paper will discuss a commonly-used statistical interpretation of "weighting" for an examination component, and will illustrate how this weighting is often distorted when different elements of an assessment are combined. Consideration will be given to the way in which disparate standard deviations and/or disparate correlations between pairs of elements, jointly and separately lead to distortion of weighting. Certain techniques which are generally advocated as corrective measures will be critically reviewed.

#### Symposium D - HISTORY OF EDUCATIONAL RESEARCH

##### The hegemony of mental testing

- Professor B. Simon.

This short introductory paper discusses the options which were open in the early 19th century and the eventual hegemony of mental testing.

##### The Development of Educational Studies in the Scottish Universities

1876-1976

- Robert E. Bell, Open University.

at Edinburgh and St. Andrews were established in 1876. The creation of similar chairs at Glasgow and Aberdeen was delayed until the 1950's. This paper will explore the origins and development of the 1876 chairs and the failure of the other two universities to follow suit. It will also examine the attitudes to educational studies of professors in other disciplines, of the Scottish Education Department, and of the influential Educational Institute of Scotland.

The establishment of the distinctive Scottish second degree in education will be discussed, and the influence of figures such as Thomson, Drever and Boyd will be re-examined. Finally the peculiarly Scottish relationship between local colleges and university departments will be explored, particularly in connection with the effect this has had upon their teaching and their research orientation.

#### The Normal Curve and some of its Abnormalities

- David Hamilton, University of Glasgow.

The assumption that mental attributes are normally distributed has become almost an axiomatic statement in education. Nevertheless this view has always been problematic and controversial. Two questions will be posed:

- 1) how did the 'normal' view initially gain adherents, and
- 2) how did it penetrate the farthest reaches of the education system?

This paper will examine one potential dissemination pathway - the Glasgow Ed. B. degree, which was taught by such influential psychometricians as Rusk, Thouless and Vernon.

#### The First Ten Years of the N. F. E. R. - papers, policies and personnel

- Harry Torrance, University of East Anglia.

This paper reviews some of the early publications of N. F. E. R. which drew attention to discrepant secondary school provision and the fact that test scores could be altered by coaching and practice. It will outline the origins of the N. F. E. R., its funding and constitution, the growth in numbers of staff and their previous occupations and training. An understanding of the work of the N. F. E. R. will be sought in relation to the social context of post-war Britain. Finally some apparent paradoxes and ambiguities in the problems chosen for study will be raised and explored.

#### The Origins of B. E. R. A.

- Professor Ed. Stones, University of Liverpool.

The paper will describe the way in which the idea for a British Educational Research Association was raised in the early seventies and how interested education researchers planned its beginnings. The early preoccupations

of the planning committee will be described and the ways sought to overcome the problems of getting a voluntary professional organisation off the ground.

Short reports will be given of the early conferences and seminars including the inaugural conference in 1974. The early discussions about the nature of the constitution and the struggle to get charity status will be reported. The work of the publications committee and the production of the first Research Intelligence and subsequent production problems will be described. The more recent developments that lead to the launching of B.E.R.J. and the gradual building up of overseas links will also be discussed.

A final section will consider what seem to be some of the key issues for the immediate future that B.E.R.A. may, or should, have to grapple with.

#### Symposium E - PIAGET'S WORK AND EDUCATIONAL RESEARCH

##### Piaget and Collaborative Learning

- John Sants, University of Sussex.

Piaget in his first books, published in the 1920's, was a passionate advocate of collaborative learning. For him, social interaction with equals was the recipe for developmental success. In The Moral Judgement of the Child he declares "If then we had to choose from among the totality of existing educational systems those which would best correspond with our psychological results, we would turn our methods in the direction of what has been called 'group work' and 'self-government' ..... allowing the children to follow their pursuits in common, either in organised 'teams' or simply according to their spontaneous groupings".

Educational reformers, from Rousseau to the Plowden report, have sung the praises of the 'democratic' class-room. Research has demonstrated its merits. What, if any, are the objections? Piaget saw none: he was in favour of social interaction between peers and hostile to imposed 'verbalism' by adult teachers. Participants are invited to comment on the feasibility of the 'democratic' class-room. Are there pressures from parents and others which make this form of education unacceptable in our culture? Or does it just not work as Piaget claimed?

Developmental psychologists are returning to Piaget's early theories of social cognition. Would it be profitable for educational research to follow the same path?

##### Piaget and Cognitive Development

- Michael Shayer, Chelsea College

The Piagetian description of cognitive development has many advantages compared with estimation of cognitive abilities arrived at by factor analytical interpretations of norm referenced tests. Nevertheless, as both Bryant (1974) and Shayer (1979) have argued, there are weaknesses in Piaget's interpretations of behaviours which can be remedied by suitable use of controls and

of experimental testing. It should be possible to study fresh areas of behaviour by a combination of the Geneva technique of clinical interview with classical test-theory so as to test any models adopted with the same rigour that is customary with experimental psychology. In this way the sterility of verbal debate can be avoided and the Piagetian model can evolve as in any other area of scientific research.

## SYMPOSIUM F - LEARNING PROCESSES AND COGNITIVE DEVELOPMENT

### Sixth-Form English Teachers' Implicit Psychology of Learning

- E. M. Wingeatt and Norman Graham, University of Aston.

A teacher's implicit psychology of learning is that psychological understanding, both naive and informed via training, which he/she has of how children learn. The study, working from a phenomenological basis, draws attention to a quite specific area in which it is possible to postulate the operation of the implicit psychology of the teacher. This area is characterised as non-interactive teaching. It is that teaching which lies outside the frenetic activity of the classroom and in which the teacher reflects on past experience and plans for the future. By using the theory and methods of George Kelly's Personal Construct Theory, which may be described as a phenomenological psychology, a series of six case studies of sixth-form English teachers' implicit psychology of learning was set up. The presentation of the case studies is followed by some discussion of findings and concluded by considering improvements in methodology and implications for teacher training.

### The role and position of summaries in instructional text

- James Hartley and Mark Trueman, University of Keele.

It can be argued that summaries have two possible positions and several possible roles. Summaries at the beginning of text

can tell readers what the text is about

can help readers decide whether or not they wish to read the text

can help readers who do read the text to organise their thoughts about what it is they are reading.

Summaries at the end of text

can list, or review the main points made, and thus

aid the recall of important points made in the text.

In this paper we present the results of five experiments which examine the effects of the position of a summary (before and after) and a control condition (no summary) on the recall of a semi-technical passage.

Processes involved in the mental representation of balanced chemical equations by adolescents

- J.P. Thomas and Norman Graham, University of Aston.

An analysis of protocols derived from asking pupils to verbalize while solving equations representing chemical reactions led to the formulation that difficulty is a function of the cognitive processing load involved and the available capacity of the solver. In the context of the neo-Piagetian theory proposed by Pascual-Leone (1970) pseudo chemical formulae equations were produced which required for their solution separate binary (easy) and combined binary (hard) operations. It was hypothesized that these levels would be reflected in performance relative to a measure of information processing capacity using Wittenborn tests and Raven's Matrices as criteria.

It was further hypothesized that explicit instructions to employ a sequential processing strategy would enable subjects to overcome difficulties arising from capacity limitations.

The perceptual basis of the understanding of some spatial adjectives in Primary school children

- M. Rathbone and Norman Graham, University of Aston.

Children acquire full comprehension of spatial adjectives by mapping the words onto the a priori knowledge they already have about space. The order of acquisition is determined by the perceptual salience of certain features in spatial concepts, and is mediated by language. The salient features are, for humans, the primary and secondary reference points, the vertical plane, and the upward and forward directions. The secondary reference point is an implicit standard against which the comparative measurements implied by spatial adjectives are made. To assess comprehension of the secondary reference system the comparative forms of spatial adjectives are tested.

The hypotheses of our study were:

- (1) that comparative forms of spatial adjectives are acquired between the ages of seven and ten;
- (2) that because of the perceptual salience of the upward and forward directions, unmarked spatial adjectives are acquired before marked spatial adjectives;
- (3) that one dimensional spatial adjectives are acquired before those referring to a less extended or non-vertical dimension.

The results supported these hypotheses.

## Dilemmas of Cognitive Development

- John Raven, Scottish Council for Research in Education.

The desire to promote cognitive development seems innocuous enough. However, research carried out in connection with an evaluation of the Lothian Region Educational Home Visiting programme shows that this is far from the case. Not only are many parents actively opposed to cognitive development itself, the activities which are wisely believed to assist in promoting it would also promote the development of other qualities like independence and the tendency to question authority. Even more parents are opposed to their children developing these qualities than are opposed to cognitive development in itself. Indeed, these qualities may stand to the children's disadvantage in the life styles they will lead. But perhaps the most important dilemma facing us arises from the fact that, in addition to opposing educational programmes designed to foster such qualities in their own children, many parents do not think that other parents should have access to educational programmes which are designed to foster such qualities.

## Symposium G - EDUCATION AND EMPLOYMENT

### Education and employment - does YOP make a difference?

- David Raffe, University of Edinburgh.

Youth employment is blamed by most social scientists on social and economic factors rather than on the individual characteristics of the unemployed or on deficiencies in the educational system. It is therefore paradoxical that the Youth Opportunities Programme (YOP) tries to tackle the problems of youth unemployment by developing the personal characteristics of unemployed young people (such as their attitudes and motivation, confidence and social and work skills) and by providing remedial education. This paper explores this paradox, using data from surveys of Scottish school leavers.

It will be argued that because YOP adds to the sources of information which employers use in selecting employees, it has helped to redistribute unemployment in favour of the unqualified through its effect on employers' selection processes.

### Education and employment - survey of Scottish leavers

- Gerard Pollock, Scottish Council for Research in Education

This study has involved the follow-up of a random sample of the Scottish pupils who originally participated as 10-year-olds in 1970 in an international study of Achievement in Reading Comprehension and Science. Contact was maintained with 1,948 members of the original sample of 2,183 from 1974 onwards throughout the remainder of their secondary education and into first employment and/or tertiary education.

A considerable amount of data covering achievement measures, attitudinal measures and home background was available from the 1970 project. In 1974 further measures of attitudes and achievements were obtained in a group testing situation (at age 14) together with job and educational aspirations. In 1975 individual semi-structured interviews were held with the sample members in the school situation at which retrospective opinions on aspects of schooling were obtained together with further details of future job and educational aspirations.

As pupils completed their secondary education from 1975 to 1978 national examination data were obtained and first post-school destination traced.

Findings will be presented concerned with careers guidance and educational and employment destination of the sample.

### Structuralism in the Sociology of Education?

- David Webster, Crewe + Alsager College.

The apparently obscure world of structuralism has recently received unprecedented public attention as a result of the McCabe affair at Cambridge. In this exploratory paper it will be argued that the essentials of a structuralist approach are visible within the writings of some major figures in the sociology of education including Bernstein and Bourdieu and that the overcoming of the gulf between the abstracted theories of macro-sociology and the empirical accounts of micro-sociology is an important task for the researcher interested in education. The paper points to the nature of the methodological problems which are involved in any attempt to bridge the gulf. Reference will be made to an ongoing theoretical and empirical study of the developing attitudes of secondary school pupils to the world of work.

### Schools and Industry: Corporate hegemony or pedagogic liberation?

- Ian Jamieson and Susan Holmes, Schools Council Industry Project.

This paper will draw on the extensive evidence collected by the Schools Council Industry Project. It will include an examination of the typical motives and interests of employers in working with schools. Different types of industrial involvement will be revealed and a developmental model proposed. A typology of school reactions to industrial links will be put forward. In general the paper will focus on the issues of the control of the curriculum and the concept of the teacher as a professional which are acutely raised by the current debate about schools and industry.

### Symposium H - ONGOING RESEARCH

#### The O R. A. C. L. E. Project

- Maurice Galton, University of Leicester.

A presentation on the current state of the S.S.R.C. programme, "Observational Research and Classroom Learning Experiences".

## Teacher - Pupil Interaction and the Quality of Learning

- Dave Ebutt, Cambridge Institute of Education  
John Elliott, Cambridge Institute of Education  
Bob Nicol, Newcastle University  
Brian Wakeman, Rotheram High School, Luton  
Ben Bracknack, Long Road Sixth Form College, Cambridge.

## The Quality of Pupil Learning Experiences

- Professor Neville Bennett, University of Lancaster.  
A report of current progress on this S.S.R.C. project which is examining pupils' work in the primary classroom.

## Curriculum Guidance Project

- Gordon Lees and Dave Woodhouse, Crewe + Alsager College.  
A presentation of interim findings from this S.S.R.C. project which is undertaking an in-depth examination in four comprehensive schools of curriculum placement in the fourth year.

## SYMPOSIUM J - THE ROLE OF EDUCATIONAL RESEARCH IN IMPROVING EDUCATIONAL PRACTICE WITH PUPILS WITHIN SCHOOLS

- Don Foster, Bristol University  
Paul Denley, Avon Resources Unit.

### (1) The Logic and Language of a Teacher/Researcher

The paper will describe and explain an individual teacher's attempt to improve the quality of his educational practice with his pupils. This description and explanation will include extracts from video tapes of the teacher at work in the classroom with his pupils. The description and explanation will have a dialectical form in which it is held that;

- 1) facts and values are logically connected in the experience of an educational problem
- 2) the 'I' of the teacher becomes a concept as the teacher attempts to improve his practice
- 3) the explanation is directly related to the teacher's practice.

The logical and linguistic nature of such a dialectical description and explanation will be related, in the second paper, to the logic and language of the Community of Educational Researchers.

### (2) The Logic and Language of the Community of Educational Researchers

An analysis of the logic and language of the community of educational researchers will suggest that it is sustaining a structured misrepresentation of educational practice. It will be argued that the members of the community are sustaining this misrepresentation by:-



- 1) Presenting their findings in a propositional form which conforms to the Law of Contradiction.
- 2) Assuming that statements of fact and statements of value form independent realms of discourse.
- 3) By excluding from a linguistic form of conceptual analysis the idea that 'I' can become a concept in a process of education.
- 4) By imposing a structured misrepresentation of educational practice upon the minds of student teachers.

(3) Educational Research in an In-service Context

This paper will analyse the educational practices of three teachers as they attempted to improve their practices over a twelve month period. The analysis will draw upon the dialectical form of the description and explanation offered in paper one and extend the analysis by including the concept of power in relation to the individual teacher's educational practice. Power is taken to be the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance, regardless of the basis on which this probability rests.

Symposium K - CASE STUDY METHODS

Extract Meaning from Case Records

- Professor Arthur Lucas, Chelsea College

In this paper the author will examine the problems of extracting meaning from case records. Using a concrete example, he shows how subtle changes in the semantic organisation of field notes can produce a significantly different picture of the school. The implications of this for case study and case records are then discussed.

Three Good Reasons for not doing Case Studies

- Rob Walker

This paper describes three good reasons for not doing case studies, drawing extensively on the author's own accounts of mistakes he has made. The three reasons given are:

1. Case study research constitutes an (often uncontrolled) intervention in the lives of others.
2. Case studies provide a very partial view.
3. Case study research is inevitably conservative.

Each reason will be extensively illustrated and grounded in experience. Considered as a whole the paper makes out a totally convincing case why

the author at least should never attempt another case study (but he makes no promises).

### Case-Study and Theory

- Professor Colin Lacey, Sussex University

This paper will describe the link between case study methodology and theory as it developed at Manchester during the sixties. It will proceed by outlining new developments and use the position developed to mount a critique of case study records.

### Between the Lines

- Charlie Hall, East Anglia University

This paper considers transcribed speech as research data, discussing problems of interpretation and readership posture. Perhaps after all we do not say what we mean but learn to mean what we have said. It's a tricky problem.

### Social and Methodological Processes in Short Term Case Study

- John Cockburn, East Anglia University

This paper examines the effects of social relationships on the data which constitutes the case record. The author notes that in long term case study the significance of social variables are ironed out over time and can be taken into account in the analysis of data; in condensed fieldwork however they are highlighted. In order to deal with this feature of case study the paper focuses on the participants definition of the fieldworker.

### Multi-site Case Study Methodology - two or three projects compared

- Dave Ebutt, Cambridge Institute

In this paper the author examines the logic of multi-site case study work by reference to those he has been involved in.

### Carrying off the Case

- Jack Sanger & John Schostak, East Anglia University

The paper considers the act of creating a case-history, where each individual is recognised as making a case for himself, and where the researcher has the task of representing to the participant the case made which is adequate to their everyday life situation but which is capable of revealing areas not immediately noticed by the participant. The case arises out of interactions and hence the case re-presented must be adequate to the dynamic out of which it arose. Original data is used to illustrate the possible re-presentations of the data as 'case-studies'. The manner of re-presentation chosen is to find ambiguous images which, like metonyms, represent the whole of which they are a part. Thus the case taken is re-presented as a potent image which encourages perceptual/cognitive transformations as the shifting meanings are explored.

## INDIVIDUAL PAPERS

### IN-SERVICE TEACHER EDUCATION IN A MULTI-RACIAL SOCIETY: some courses and their consequences

- David Dunn and Anjali Purewal, University of Keele.

Eleven in-service courses intended to enhance the professional expertise of teachers in a multi-racial society were selected for study. Courses varied in duration, mode, aims and level. They were provided by colleges and L.E.A's at various locations throughout England. Recruitment, content and consequences of courses were studied by various means, including participant observation and questionnaires. The predominant method was unstructured depth interviewing of participants, and analysis of interview transcripts. The study showed evidence of differing motives for enrolment, including career advancement. Course contents approached the relationship between schooling and ethnic minorities in various ways. Consequences reported by participants included professional advancement, changes in personal awareness on racial and linguistic issues and enhanced relationships with pupils. The paper will discuss these findings.

### THE ASSESSMENT AND INCIDENCE OF SPECIAL EDUCATIONAL NEEDS

- Paul Croll, Diana Moses, Jane Wright, University of Leicester.

The research reported in this paper forms part of a large-scale project funded by the Department of Education and Science. The project is concerned with the ways in which teachers in ordinary schools come to assess pupils as having special educational needs, the consequences for pupils of being so assessed, and the incidence and epidemiology of special needs to which patterns of assessment give rise. The concept of special needs in the project is derived from the Warnock Report which proposed abandoning the statutory categories of handicaps and replacing them by the notion of special needs. It suggested that about 16% of the school population might be regarded as having special needs. The paper will give an overview of special needs as seen by junior teachers and consider some of the factors influencing these perceptions.

### CONSTRAINTS ON HANDLING OF CONTROVERSIAL ISSUES IN THE CLASSROOM

- James McKernan, University College, Dublin.

The research examined the extent to which 202 teachers in post-primary schools in Northern Ireland felt they were constrained from dealing with controversial social, religious and political issues in the curriculum. Teacher attitudes were measured on a number of variables related to teaching controversial issues. A method of ranking the constraints which were identified is presented, and the results of a survey of Catholic and Protestant teachers ranking of sixteen teacher, school and communal constraints is described. The results suggest that there is a great deal of concordance between religious groups in ranking the constraints. The implications of the constraints survey are discussed in the light of developing the post-primary curriculum particularly in social and political education.

TEACHING STRATEGIES IN FURTHER EDUCATION: some Western  
Australian data

- John Williamson, Western Australian Institute of Technology.

This paper presents some data from the TAFE Project in W.A., an R & D study funded in part by the Technical Education Division of the W.A. State Department of Education, which was carried out in 1979. The purpose of the study was to provide a comprehensive and detailed answer to the question "What is it that TAFE teachers do?" Particular emphasis was given to method and strategies of teaching, interaction with students and colleagues, curriculum planning and assessment. A sample of 130 TAFE teachers completed a questionnaire on their teaching strategies and other closely related activities (e.g. planning and marking). A further sample of 88 teachers was individually interviewed and observed in their classes. The data indicated a high degree of uniformity in the teachers' instructional activities and approach. The data are discussed to emphasise the implications for the initial preparation programmes of further education staff.

COMPUTER APPLICATIONS IN SOCIAL SCIENCE TEACHING

- Peter Goodyear, University of Aston.

Recent developments in evaluating the potential of CAL have demonstrated that there exist very specific opportunities for exploiting the power of the computer. This paper attempts to identify the degree of congruence between the strengths of CAL and problem areas in social science teaching at secondary and tertiary levels.

The most salient problem area, common to most social science disciplines, is the need to develop skills in manipulating and assimilating large quantities of empirical data. Experience in mathematical modelling, graphical analysis, inferential statistics, data-base handling, information retrieval, experimental simulation and data exploration and reduction can all be facilitated by use of the computer. Dispensing with the necessity for time-consuming, error-prone hand calculations can allow students to concentrate on the core tasks of analysing, interpreting and modelling the social world.

The paper also touches on alternative approaches to social science and social science teaching - to demonstrate some unexpected areas for computer applications.

QUANTITATIVE METHODS AND THE IDEALOGY OF SOCIAL CONTROL:  
implications in the teaching of social science

- Peter Goodyear, University of Aston.

This paper is concerned with the changing status of mathematical and statistical methodology in university social science teaching. Special reference is made to developments in undergraduate human geography but implications for curriculum change at school level, and in other subject areas, are also explored. A major transformation in most social science disciplines in the last

thirty years has been the adoption of a self-styled scientific paradigm, echoing the positivist/empiricist model of the natural sciences. This transition from literary descriptive art to empirical science, has been uneven and fraught with conflict. Now, to complicate issues, enthusiasm for quantitative methods and the scientific styles of positivism has waned under the alternating assaults of marxism structuralism and phenomenology. The paper will report exploratory research on these developments.

#### IDEALISM AND REFORM: T. H. GREEN AND THE EDUCATION OF THE MIDDLE CLASS

- David Watson, Oxford Polytechnic.

Recent histories of nineteenth and early twentieth century reform have attempted to explain the impetus towards specific reforming achievements and the emergence of the "new Liberalism" in terms of group interaction and personal influence. This paper selects an aspect of the field and suggests the value of an approach based in this history of ideas. Green's educational theory is seen as supplying a particularly interesting link between complex technical philosophy and the concrete prescriptive concerns of a generation of educational reformers.

The bulk of the paper draws on Green's work with the Royal Commission of 1865-6, the Oxford School Board, and teachers' associations, and attempts to establish his aspirations for a co-ordinated national educational system. Emphasis is placed on his scheme for grading schools and curriculum, his plans for easing access to higher education, and his views on moral and vocational education.

Finally, the paper explores the implications of these ideas for traditional class authority, the established church, and the social philosophy of laissez-faire. Green is shown to advocate some elements of radical social engineering as well as a view of national leadership that takes account of social stratification.

#### PRE-SCHOOL ENVIRONMENT AND PRE-SCHOOL BEHAVIOUR

- Dr. Sean Neill, University of Warwick.

A correlational and an experimental study of the effects of pre-school playroom design will be described. The correlational study indicated marked differences in children's behaviour between open-plan and box-playroom pre-schools. However the experimental study showed that alterations to the acoustic and visual qualities of a playroom by screens and carpets produced differences which were not educationally significant, though they were statistically significant. The reasons for this discrepancy will be discussed in relation to studies of other aspects of the pre-school environment.

## WHAT CAN SCHOOLS DO TO REDUCE OCCUPATIONAL STRESS AMONG TEACHERS?

- Chris Kyriacou, University of York.

This paper examines recent research findings which have sought to identify the main sources of stress experienced by school teachers and the ways in which they attempt to cope with stress. In the light of these findings some suggestions are made for changes which may reduce the levels of stress experienced. Particular attention is paid to the need to improve the amount of social support a teacher experiencing a great deal of stress can receive. In addition, attention is paid to the levels of workload expected of teachers. At the very least, schools need to ensure that when arranging the cover of lessons for absent staff, this does not regularly result in the inadequate provision of preparation periods remaining for those 'on duty'.

Consideration is also paid to sources of stress arising out of pupil misbehaviour. Schools need to ensure that a greater consensus exists among staff regarding the disciplinary policy of the school, the minimum standards acceptable, and the disciplinary sanctions available.

### THE ASSESSMENT OF TEACHER STRESS

- Professor R. Whitfield, University of Aston.

In recent years there has been growing interest in occupational anxiety and stress within the teaching profession. However a major difficulty with regard to such issues rests in the reliable assessment of teacher stress. In this presentation the developed form of a short questionnaire measure of teacher stress will be described as a part of a pilot study of secondary schoolteachers' working conditions. Significant relationships of assessed stress with position in school and three school variables will be provisionally reported.

### PEDAGOGY SEMINAR

At the end of the Conference a pedagogy seminar/workshop took place, convened and chaired by Professor E. Stones (University of Liverpool). The aims of the seminar were to exchange experiences, to clarify concepts and to explore possible future developments. The following brief papers were given:

B. Simon	Neglect of pedagogy.
D. Hamilton	Pedagogy by historical example
E. Stones	Psychopedagogy and teacher education
M. C. Jones	The implications of 'Learning to teach'.
N. Graham	Cognitive Science and pedagogy
R. McAleese	The conceptualisation of the ideal lecture.
P. Alston	Music and pedagogy