

# FORUM

## FOR THE DISCUSSION OF NEW TRENDS IN EDUCATION

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### Resource-based learning

**Examinations Policy in Comprehensive Schools**

*Joan Simon*

**Two Sources of Learning**

*David Hawkins*

**Integrated Studies Project**

*Arfon Williams*

**Man: A Course of Study**

*Ron Morgan*

**Discussion: Roy Haywood**

**Science and the 9-13 Middle School**

*Peter Prosser*

**Archives and the Teacher**

*G A Chinnery*

**A School Resource Centre**

*Malcolm Holder*

**Five Schools and an Estate**

*Paddy Netscher*

**Preparation for Provision of Nursery Education**

*Douglas Hubbard and John Salt*

**Reviews**

*B Simon, B Bryan, R Seckington, P Radley, D N Thomas*

# Indictment of Margaret Thatcher

## Hindrances to Secondary Reorganisation 1970-73

(forthcoming)

'This Association believes that each LEA has the right to organise secondary education in its area on comprehensive lines and that any such scheme should not be modified by the Secretary of State so as to interfere with this concept.'

*Association of Education Committees,*  
1972.

'For one proposal to be fairly regarded as a modification of another proposal, one must be able to perceive enough in it of that other to recognise it as still being that other proposal, even though changed.'

*Mr. Justice Megarry, 1972.*

'Mrs. Thatcher has left us with educational and administrative anarchy. If we were to accept her decision as it stands it would go against every principle that we have endeavoured to incorporate in our scheme including those set out in her own circular.'

*Chairman of an Education Committee,*  
1973.

'It is time the bluff was called and the Secretary of State prevented from exercising her prejudices through the obscure application of unsatisfactory criteria.'

*The Teacher, 1973.*

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# A Summer's Outrage

Opposition to Mrs Thatcher's irresponsible non-policies has been mounting during the summer. Now the notorious bastion of backlash, The Monday Club, has rallied to her support and urges further dismantling the school structure that has slowly, and albeit piecemeal, been built over the past hundred years to serve our evolving democratic society.

At their respective Easter and summer conferences the teachers' various associations launched their attacks on the White Paper, belatedly recognising that it was no **Framework for Expansion** but a recipe for contraction. The proposed cutback on teacher supply and the general running down of educational expenditure came in for consensus condemnation. Then in June the Association of Education Committees came out firmly against these features of the White Paper. The TUC was next to issue a statement on the same theme. All this opposition was fully substantiated in July by a thoroughly researched report from Manchester University which, sharply critical of DES statistics, found that the 1981 target figures would produce only a slight improvement on the 1971 position, possibly reducing primary classes to 40 and secondary to 30—to reduce all to 30, 59,000 more teachers would be needed. At the same time the DES admitted to intending no more than a ten per cent improvement on 1971. Before July was out it had revealed that in January 1972 primary classes with over 40 children still persisted in all but fourteen education authorities, three having over 11 per cent of such oversize classes and fifteen more having over 5 per cent.

In August the critical shortage of teachers for the new school year became increasingly evident, particularly in secondary schools. Panic stricken, one LEA went all out to recruit untrained graduates—the last time this stop-gap measure can be used. And the fall-off in graduates applying to train this year indicates that the position may be worse next September.

The other main cause for this summer's outrage against Mrs Thatcher has been her increasingly blatant onslaught on the growth of comprehensive schools. **Circular 10/70** having singularly failed to produce the response she undoubtedly hoped for, she has persistently exercised her power of veto to make meddlesome nonsense of schemes for comprehensive reorganisation submitted to her by LEAs. Her tamperings with Birmingham's and Liverpool's plans are perhaps the most outrageous examples of her determination to preserve selective secondary

schools.

Mrs Thatcher is clearly acting counter to massive public and professional opinion. Not only the TUC but now the Association of Education Committees 'strongly supports the principle of comprehensive education'. This is indeed significant. She must take comfort from the applause of the Monday Club for her role as saviour of a hundred grammar schools and rather fewer secondary moderns.

**Forum** sees these issues of teacher supply and comprehensivisation as equally important for improving educational opportunity and enabling all children to benefit from improvements in the quality of education that modern professional expertise makes possible. An advance of only ten per cent on 1971, even if achieved, clearly implies no intention that ROSLA shall herald any dramatic increase in the number of youngsters staying at school beyond sixteen. Mrs Thatcher's lack of interest in a Certificate of Extended Education tells the same tale. Slowing down the trend towards a fully comprehensive secondary system throughout the country will also serve to discourage the trend to stay on.

International comparative studies have shown that comprehensive systems make for greater retention and that opening opportunities at one level increases demand for the next level of education. Thus a restrictive school policy will aid the government in curbing expansion of further and higher education.

Mrs Thatcher has not dared to enunciate an openly anti-comprehensive policy; but the chairman of the Monday Club's education group advocates the logical extension of the policy she has covertly operated when he calls for more schools to become Direct Grant with means-tested fees.

We confidently challenge the Monday Club's belief that an overtly anti-comprehensive policy would win a million votes. And we welcome the Labour Party's new commitment to outlaw eleven-plus selection and end Direct Grant status.

Despite the crisis of the moment, **Forum** takes heart at the evidence of mounting opposition to current retrogressive policies. A study just reported in *The British Journal of Educational Psychology* shows that majority public opinion no longer believes that IQ is constant and now recognises the importance of environmental influences. It is clear that the public is becoming aware of the damage that threatens its schools and largely supports the kinds of policies for which **Forum** has consistently argued.

# Examinations Policy in Comprehensive Schools

**Joan Simon**

Occasional reporter for *Forum*, substituting for Roy Waters of the Editorial Board who was unable to be present, Joan Simon writes this Report of the Forum Campaign for Comprehensive Education conference held at Friends House, Euston Road, London on 16 June 1973.

'Examinations Policy', in relation to the achievements and aims of comprehensive schools, was the subject of the annual Forum/CCE conference this year. The position at 16+ and the proposals for a unitary examination at this stage were discussed at the morning session chaired by Jack Walton, sixth form examinations in the afternoon when Brian Simon was in the chair, each discussion being opened by three speakers taking up different aspects of the matter. As the three main opening speeches will be published in full in the bulletin of the Campaign for Comprehensive Education, this report will give a brief overview of points that came up in discussion.

Discussion tended to veer between what is and what ought to be, as one speaker said, and differences emerged accordingly. In general terms the present move to reorient examinations brings to the surface opposing approaches to secondary education—the selective and the comprehensive—since the examination system tends to crystallise the traditional outlook and any reform that falls short of revolutionising it may therefore appear as the creation of a fresh barrier to the work of comprehensive schools. But in practice the current problem for supporters of comprehensive education, as at earlier stages in the battle to break out of the traditional selective system, boils down to discovering the best tactics to safeguard long-term aims—rather than engaging in the formulation of an ideal solution.

The traditional view—as critically assessed, mainly by Denys John, headmaster of Nailsea Comprehensive School, Somerset, and a member of RASP (Reform of Assessment at Sixteen Plus)—is that the secondary school is a 'filter', discriminating between pupils, dividing them up, preparing them for different routes into life—the primary division being between those destined for higher education and those entering employment at 16. Initially this concept found expression in terms of the tripartite system with a selection examination at 11+ geared to exclude 80 per cent of pupils from a full secondary education. Otherwise examinations were essentially conceived of in 'grammar school' terms; at 18+ related to university entry, at 16+ to provide

something for 'early leavers' in terms of Ordinary Level GCE—though in practice this has served for university selection as well as the information of employers.

That many employers make little use of examination results, as opposed to asking for judgments of character from schools, was a point frequently stressed in discussion; if they use them it is mainly because they are part of the system. Accordingly there is little basis for the argument that a 16+ examination should be geared to their supposed demands. It is the school system that creates examinations, in terms of aims and the needs of pupils for incentives and assessment.

Secondary modern schools, initially and expressly excluded from taking GCE, fought for and won the right to enter their 'best pupils' at O level. Subsequently regional examinations were designed for others from which there developed, in 1965, CSE with a grade 1 equivalent to O level. This examination, it must be remembered, successfully replaced a chaos of semi-commercially run alternatives. Eventually, and most importantly, came Mode 3 CSE incorporating, or allowing the realisation of, new ideas about the curriculum and teacher control of assessment, from which much has been learned. Indeed there is now a Mode 3 GCE and the principle of teacher involvement is generally recognised.

This development coincided with the growth of comprehensive education, the breakdown of tripartitism and the discrediting of 11+ including the 'objective tests' on which it relies.

In the outcome the proposition that teachers were asked to accept in the 1950s—that only 20 per cent of children are examinable—has been totally disproved by practice. Similarly, sixth forms are more than double the size earlier envisaged, in the days when officialdom required comprehensive schools of at least 1,600 to provide a sixth of adequate size. Comprehensive upper schools were undertaking new and varied tasks, not necessarily related to sitting examinations. But their very success, and the consolidation of CSE, have given rise to the proposal for a Certificate of

Extended Education to follow up this course, in parallel with new forms of 'A level' examination.

At the same time there is a move to introduce a single, unitary, examination at 16+, initiated by the Schools Council in 1970, since when feasibility studies and experimental examinations have been in train. This coincides with the raising of the leaving age to 16, nearly thirty years after this reform was written into the Education Act, but not all the implications have been taken into account. While, then, there are positive aspects, the negative one is that, in the formulation of examinations policy, there is a tendency to fall back into traditional and discredited methods of thinking, likely to clamp a pattern upon a developing situation.

This marks a third stage of the battle to break out from a traditional system whose values have been preserved over the whole range of secondary education, including comprehensive schools, largely by way of the structure of examinations; examinations which, by their very nature, presuppose that it is the object of secondary schooling to discriminate between pupils and place them in a hierarchy or rank order. Hence a natural tendency to fear a new examinations policy as likely to crystallise matters in such a way as to subordinate new developments to an old outlook.

## rejecting 40 per cent

The main point at issue at the 16+ stage was the Schools Council decision to attempt to amalgamate GCE and CSE, rather than considering the proper form of examination at this stage of secondary education for all. As Dr Gordon Barrett of the Schools Council made clear, in outlining feasibility studies now in train, the aim is to discover whether assessments can be made 'across the wide range of ability currently covered by O-level and CSE within a single examination or examination system'. In other words, despite the progressive increase in attainment and curricular developments in recent years, it is still taken for granted that there is a definable and fixed 'ability range' in relation to specific forms of curricula. Furthermore it is assumed that, for the purposes of examination, the range to be considered covers only 60 per cent of pupils—the top 20 per cent who now take GCE, the next 20 per cent who take good CSEs, another 20 per

cent who take some CSE subjects—leaving 40 per cent out as 'unexaminable' by comparison with the 80 per cent once eliminated by 11+.

If this is a considerable improvement in quantitative terms, it clearly points to the lack of qualitative change in overall ideas. To apply these afresh in this way—as was argued by Pat Daunt, Headmaster of Thomas Bennett School and Chairman of CCE—is 'to collide, head on, with comprehensive *principles*', and not only principles but current *practice* insofar as the elimination of streaming is now moving up into the 14-16 age range; and, too, flexibility is pursued in sixth forms which do not revolve around examination courses alone, nor wish to devalue non-examinable aspects.

Once a static standpoint of this kind is the point of departure, as discussion illustrated, confusion of thought multiplies in other directions; always related to tacit acceptance of 'the grammar school tradition' or, at least, of 'things as they are now'. Thus the Briault Report (*Schools Council Working Papers 45*, 1972, and *46*, 1973) assumes that 'the best' curriculum for the average pupil staying on at school beyond 16 is a 'well balanced', or liberal, one; an assumption backed by present university desires to reduce overspecialisation, as illustrated in the recommendation that five subjects be taken at a new N/F level at 18+ of the Butler Report (*Schools Council Working Paper 47*, by a joint working party of the Council and the Standing Conference on University Entry).

But pupils stay on for many reasons—as John Watts, principal of Countesthorpe College, Leicestershire, underlined—and quite often for one particular reason which they should be free to pursue. Here the problem of introducing openly vocational subjects arises, and with this another longstanding assumption, that these are not really the province of schools but rather FE Colleges. A child who just wants to do 'his thing', it seems sometimes to be assumed, oughtn't to be in school.

Again the Briault Report advocates a one year course for the proposed Certificate of Extended Education on the grounds that, at present, about 40,000 of the 45,000 pupils over 16 in school and not sitting A levels, leave after one year. But where is the logic of planning a future examination in the light of a pattern established in the absence of any incentive to stay on longer? Once more, this is a static approach, relating to present organisational forms rather than future educational objectives.

There is, indeed, a close parallel between the opening sentence of the Briault Report No 2 and what was once said about mixed ability grouping in the primary and lower secondary school where this is now general, as the chairman of the afternoon session pointed out. 'The sixth form today covers a wide range of ability and attainment. The one thing that nearly all practising teachers are agreed on is that it is not feasible to teach a given year group all together for a single programme of work within a given subject, or to assess their work in a single examination'—a point later rebutted by practising teachers whose experience has taught otherwise.

It was to this negatively restricted approach that continuing objections were raised, speakers stressing that fixed courses and examinations hinder flexibility and ability to change direction as now encouraged; that attempts to amalgamate GCE and CSE are likely to result in the values of the former stifling those of the latter; that in any case there is a danger to Mode 3 as the numbers examined increase, given the necessary expenditure of time and greater financial outlay, and this flexible form of examination under teacher control has been the support, or spearhead, of curriculum development.

But the greatest objection, in principle, was to excluding 40 per cent of children from examination at 16+, or accepting a system which automatically fails two out of five children kept in school by law. 'There is no rational foundation for the view that the work of some, or any, children cannot be assessed', declared Pat Daunt, claiming that the establishment of a compulsory leaving age of 16 implies 'a civic right to have one's work nationally assessed'.

By contrast Dr Barrett had argued that some teachers think it an impossible task even to merge O level and CSE and that 'a fully comprehensive examination system' would have to be quite different from the present one. 'The public examination is a discriminating attainment test; it places children in rank-order in each subject' and 'a single set of grades has to be used in the award of results'. Incidentally, the current idea about grading a new 16+ examination is 'three grades to cover the O-level pass range with the retention of grades equivalent to CSE grades 2-5 and unclassified'.

The radical alternative of abolishing all examination at 16 would not, he was sure, find favour generally with parents, teachers, society. But there is obvious

room for improvement in an examination which at present serves such a 'multiplicity of objectives', as a terminal and an intermediate test, a school leaving and a qualifying one. More teacher assessment is one suggested remedy, which means supplying teachers with the necessary conviction, confidence and skills. There remains the sheer volume of work involved, given a projected 470,000 16-year-olds in full-time education by 1980, as against 236,000 in 1971; and more enlightened examining costs much more, a point that will inevitably come up for discussion.

Matters are even now approaching a collision course in terms of overloading the profession, an education adviser from Devon affirmed. It could not continue coping with increasing demands, as involved in re-organisation, in-service retraining, meetings after school, on top of normal commitments. Add moderating examinations on the scale envisaged and there could only be a loss of personal efficiency, even breakdown. Something would have to go and he hoped it would be examinations.

Others supported the point that the relaxed, accessible, teacher—so vital in the development of new forms of guidance in learning or experience in communication—could only disappear beneath wholesale examination systems operating every year, at 16, 17, 18.

## **the right to examination**

What appeared to be the development of an anti-examination lobby evoked another response from a number of quarters, in favour of new opportunities for the majority. Leave aside employers and parental demands, the children want incentives, grades, examinations. Success in CSE is the basis for a demand for CEE and where enquiries have been made among pupils, or pilot schemes introduced, the response has been very positive. The important thing, it was emphasised, is not to allow CEE to become a dead-end one-year course but to think of its end product and trade-in possibilities—as the Briault Report fails to do.

More generally it was argued—by a teacher in a London comprehensive school—that examinations policy is the current battleground and it would be a grave mistake to vacate it with the slogan 'no examination'. Even the Schools Council proposals for 16+, open to criticism though they may be, have vicious opponents, including within the secondary teachers'

associations and subject associations. Certainly a comprehensive examination taking in all children is needed and there should be pressure for it as a 'civic right'—a very important claim to be upheld. But the immediate task is to raise the standard of achievement still further and to this end a main need is external examination at 16+. This being so, a single examination should be welcomed with open arms, rather than concentrating on imperfections.

A wider view was urged by one speaker, referring to the European context and the need to think not merely in parochial terms of specifically English forms but of European examinations by the 1980s. Someone suggested dropping the term 'examination', with all its connotations, in favour of 'assessment'. Anything worth doing is worth assessing and in practice CSE goes well below the specified 60 per cent level—though the Schools Council has yet to appraise the realities—and would only not do so if all pupils were made to sit several subjects.

## meaningful assessment

In this connection, Professor J F Eggleston, of Nottingham University, introduced a new perspective with a devastating dissection of examination procedures in relation to traditional aims. Examinations have one purpose, to discriminate between people; they discriminate to predict and to select. At their worst they pursue this task at the expense of educational considerations—as is illustrated by the 'objective test' which, in order to discriminate more finely, eliminates all questions that most pupils can answer, and all that most cannot answer, in favour of including only questions answered correctly by those who do best in the test as a whole. This procedure incorporates an unexamined assumption, that there must be some 'unitary trait' enabling a pupil to do, say, a chemistry O level paper well and this is what is being measured; an assumption which is absurd. By contrast, what is needed to realise educational aims is a description of attainment which serves a genuinely instrumental purpose in terms of aiding teachers to improve teaching and pupils to understand themselves and so exercise their own choices.

In other words, in place of the single-dimensional choice now offered—to go or not to go to university—there must be a move to multi-dimensional thinking

and this implies something very different from examinations on the present model. It implies assessment in the form of descriptive 'profiles' which can reflect back on teaching and enable pupils to assess their own potentialities and prospects—which constitutes a genuine contribution to education. Difficult though the task may be, it must be tackled, to provide an educational replacement for the present 'blunt instrument' of the standard examination.

This was not a matter that came up for full discussion, references to providing 'profiles' usually being concerned to underline the difficulties rather than examine the implications—in terms of an alternative to what are already time-wasting and expensive examination procedures, a point frequently underlined.

What might be called the practical approach was outlined by Alan Evans, of the secondary section of the NUT—substituting for Dr Walter Roy who was unable to attend. He strongly supported the move towards CEE, an examination envisaged as something really new—not CSE Mode 1 which is only GCE under another name—and incorporating a form of teacher control in advance of that achieved by CSE. The need is there, and the desire that it be met on the part of teachers and pupils, but opposition comes from the Secretary of State and the DES.

The reason why extensive and expensive feasibility studies are being undertaken into the unitary 16+ examination is that some members of Schools Council are convinced that overwhelming evidence is needed before the proposition will be accepted—and the same idea applies to CEE. In fact Mrs Thatcher has refused to allow an experimental CEE, though experimental 16+ examinations are in train, but nonetheless a number of CSE Boards have gone ahead with pilot schemes; so at the end of this year some pupils will get a CSE plus—if not a certificate. But the Briault Report No 2 has come out in support and there is no need to wait until all the 18+ examinations have been reformed. True, the support is timid in that a target group of 25 per cent only is envisaged—that is, those gaining between grade 2 and 4 CSE—but it is there; though there is also a proposition that there be feasibility studies of some aspects.

'The Lord preserve us from feasibility studies', said Alan Evans. It had been hoped that a plan for the 16+ examination could be submitted to the Secretary of State in 1973 but they had recently been told it could not be until 1975 and now research officers of examin-

ing boards were saying papers would not be ready for this autumn so that the date might be advanced to 1976 or 1977—that is seven years after the original decision in favour of a unitary examination. The lesson should be learned and a plan for CEE put in quickly, shunning feasibility studies. The Secretary of State is likely to accept it because, basically, she doesn't care about this section of the school population, her interest being confined to the two-ninths on a linear course to a degree. If she could be induced to accept certification, CEE could be introduced in September 1974.

Others underlined that there is no need for feasibility studies, that pilot schemes of the kind already under way are the answer. In an Essex comprehensive school such a scheme is directed towards a flexible pattern of either a one- or two-year course to CEE, which could thus encompass a diversity of studies in the first year sixth—rather than concentrating narrowly on the Briault concept of a one-year course.

John Sayer, headmaster of Minehead School, underlined the need to work for the best solution in all the circumstances which would operate to keep the way open to desired ends. For one thing it might be suggested that feasibility studies concentrate on the overall effect on any one pupil of the whole examination structure proposed—unitary 16+, CEE at 17+, N/F levels at 18+—which would provide a fresh view of the matter in terms of pupil activity and aspiration. Then the relevant questions must be asked in terms of what is appropriate to the internal needs of the schools, ie what kind of incentives are appropriate. In other words, while there must be criticism where criticism can be well based, constructive comment on the Working Papers is called for.

The point was taken up by Professor Brian Simon, in a final summing up. It was in 1958, he recalled, that *Forum* was launched and shortly after the Comprehensive Schools Committee as it then was, with as a main objective the superseding of 11+ selection. Thus the whole movement towards comprehensive education had hinged on the abolition of an examination, seen as restricting educational endeavour in both primary and secondary schools. Similar problems now arise in terms of 16+ and 18+ examinations, conceived of as selective instruments.

As Professor Eggleston had shown, assessment can be seen in quite different, educational, terms as a form of feed back for the benefit of teachers and pupils; and in this connection CSE Mode 3 has taught a great deal

—an example to be kept in mind. There is general agreement that a basically common educational experience for all up to the age of 16 should be provided. Otherwise differences are, really, about tactics, or the best way to ensure that the road towards continued educational advance is kept open—as against allowing a new, but still divisive, examination system to close doors. Clearly, CEE and N/F levels are devised to fit the situation now arrived at rather than in terms of future objectives. There is room for a great deal more thinking about methods of assessment—the recently published Butler/Briault proposals have yet to be digested and could not be fully discussed at this conference—and about how to keep the options open for work towards a basic common objective at 16, 17 and 18 by avoiding over-strict definitions of alternative paths.

In all the forthcoming discussions comprehensive schools must make their voice heard, in opposition to fresh consolidation of the old system and ideas, and this implies working out an agreed policy and strategy to be pursued by all supporters of comprehensive education.

*Note on the literature.* The two reports of the Schools Council's Second Sixth Form Working Party, under the chairmanship of E W H Briault, are **16-19: Growth and Response 1. Curricular Bases** (1972), **2. Examination structure** (1973), Schools Council Working Papers 45 and 46. The report of the Joint Working Party of the Schools Council and the Standing Conference on University Entrance, under the chairmanship of C C Butler, director of the Nuffield Foundation, is **Preparation for Degree Courses** (1973), Schools Council Working Paper 47 and SCUE: Sixth Form 73/2. Both this and the new Briault Report are summarised and discussed in some detail in the NUT journal **Secondary Education** vol 3, no 3, Summer 1973, which has a particularly relevant article 'Goats, Sheep and Supersheep?' by Cyril Poster, Headmaster of The Sheppey School, Kent. The report of the Schools Council Working Party outlining the thinking behind the research programme relating to a unitary 16+ is **A Common System of Examining at 16+**, Schools Council Examination Bulletin 23 (1971). An information leaflet '16+ feasibility and development studies' provides more up to date information, including about experimental examinations; another short leaflet has been produced, 'Arguments for a Common System' to encourage discussion. See also Jim Eggleston and Derek Holford, 'Recent Trends in Examining', *Forum*, vol 13, no 2 (1971), vol 14, no 1 (1971).



# Resource-based Learning

## An editorial introduction to the theme

**Forum** has decided to open up discussion of resource-based learning in schools. Several Schools Council curriculum development projects and the Nuffield Foundation have promoted this trend over recent years, Teachers' Centres are often geared to it, some LEAs are setting up Resource Centres in schools, publishers and manufacturers of educational technology bombard teachers with the material means.

Is resource-based learning a fruitful trend capable of development towards more intelligible and accessible education for *all* children? Is it merely a new tactic in the classroom or is it a distinctive approach to the learning process and the organisation of knowledge?

As David Hawkins says in our first article, didactic and textbook based learning replaced resource based informal learning only with the advent of schooling, and ever since then thoughtful educators have tried to recover and incorporate the benefits of pre-scholastic learning. Schools' lack of success in this has prompted the retrograde de-schooling ideology.

To use a variety of teaching resources is partly a reaction against semi-rote learning from the single textbook, teacher's monologue and blackboard notes. In the postwar decade this reaction led to publication of a variety of supplementary topic readers, more use of the school library or creation of classroom mini-libraries, expansion of radio and later television for schools, occasional educational visits and fieldwork. **Jackdaw** folders, filmstrips and museum diaspora were further supplements to the pre-digested to-be-regurgitated textbook.

This wider range of resources at the teacher's disposal remained essentially didactic or was seen as fringe activity to stimulate interest. Even 'doing experiments' in science remained didactic rather than heuristic before Nuffield, and much 'project' work in primary schools was run parallel with largely didactic methods. 'Learning by doing' and informal exploration of the environment won readier and earlier acceptance among infant teachers.

Less didactic and textbook oriented methods began to be used with children in 'non-academic' streams in secondary schools. From Hadow to Newsom the pundits have advocated a 'practical' curriculum for them. Seized on as panacea to con unwilling pupils, non-didactic methods were liable to be unstructured and somewhat aimless. They were unsuited to GCE demands for recall of syllabus-prescribed, learnt information.

Nuffield Science heralded a breakthrough in that it

was intrinsically heuristic, tried to work with the child's sequential learning, and was first designed for the academically ablest. Our fourth article shows how Nuffield approaches have permeated science teaching today. The educational principles involved owe much to the psychologist J S Bruner, whose latest book we review on page 30. His ideas are embodied in the social studies project **Man: A Course of Study**, which is probably the most thoroughly developed example of resource-based learning and is examined in our third article. Less structured and more empirical, the Schools Council **Integrated Studies** project was evolved through a somewhat similar approach to learning as is evident from our second article.

Resource-based learning requires children to use a range of resources and media to find information, solve problems, carry out investigations, determine properties, create new forms, formulate and test hypotheses and be able to interpret and communicate their findings or achievements. Such learning is akin to informal pre-scholastic learning but is guided and controlled by teachers. They must decide what learning is worthwhile and hence what outcomes are desirable and within the children's competence. Success is needed to sustain motivation; fruitless enquiry, haphazard searching that discovers no more than ephemerally intriguing trivia, and tasks beyond their capacities destroy motivation. Teachers cannot abdicate their responsibility to see that learning takes place and the necessary instrumental skills are acquired.

The teacher's function is more complex than in didacticism for content coverage. Not only do children require a wider range of skills, but the goal is independent learning through knowing how to find out. Divergent and convergent thinking are called for. A variety of verbal and non-verbal forms of representation and communication are used. Resource-based learning breaks through the artificial confines of scholastic values.

More meaningful forms of assessment become not only possible but necessary, as Arfon Williams explains. This could open the way to those multi-dimensional descriptive profiles discussed at our June conference, which is reported on the previous pages.

More varied demands are made of both teachers and children. Ancillary support, organisation and preparation of resources, new expertise and the contribution of educational technology become significant factors as our last two articles in the series illustrate.

*Continued on page 29*

# Two Sources of Learning

## David Hawkins

Professor Hawkins spent a year observing British primary schools a few years ago, and has kept in touch with the educational scene here ever since. He now works at the Mountain View Center for Environmental Education at the University of Colorado. Here he explores the principles underlying resource-based learning.

In discussions of education there is an easy and frequent polarisation with which we are all familiar. On the one hand learning—of an educationally significant kind—is perceived as something which takes place only under the sway of a teacher's voice and presence; as a reception, comprehension, and retrievable storage of that which is communicated by the teacher. Resources of various kinds may improve the motivation and increase the probability of such learning. On the other hand learning is seen as the process and precipitate of extending the learner's experience through his own active inquiry and synthesis, through his involvement in or with primary subject matter. Such inquiry is based upon resources which teachers can provide, and is of course facilitated by their confidence and their administration.

This latter conception, of resource-based learning, is predominant in the educational practices of mankind. It is only with the coming of schools and scholasticism that the older informal methods have been replaced so extensively by didactic methods. These have brought with them, in turn, the conception of learning as predominantly a reception of pre-codified knowledge, in which practice is so to say removed from field and shop and diminished to the level of the work-book.

Over the two centuries since Rousseau and Pestalozzi the attempts to revive and extend the conception of resource-based learning within schools have gradually achieved some status and recognition, notably in Britain. Until recently this evolution has been mainly (though not exclusively) concentrated in the early years, in Infant Schools. But there is reason to believe that a considerable extension of this evolution is now possible. One reason for such optimism is that the tradition itself has gained in strength and sophistication through the devoted craftsmanship of many thousands of teachers and of others who work with them. Another reason is the increasing recognition that formal didactic teaching as a steady diet for the young has never been effective except as a consequence and concomitant of a more eolithic kind of education taking place outside of school years and walls—of a kind moreover very unevenly available in economically

and educationally stratified societies. The failure of conventional schooling for the greater proportion of our children has become increasingly conspicuous. It is a worthy achievement, frequently demonstrated, that a fairly radical shift toward resource-based learning can beat the conventional system, even by the latter's own narrow standards. It is a worthy achievement, but not a momentous one.

There is, I think, another precondition of further progress, one especially important to focus on when we consider the extension of such practices into the whole range of ages. This condition has been satisfied in some degree for the early years, where of course much further effort is needed. But it is an age-dependent condition, and too little has yet been done to satisfy it for the upper levels of education.

To help define this condition I would like to refer to two connected analyses by John Dewey. The first in a sense undercuts the either-or polarity of the two contrasting views of education I began with, and perhaps suggests the framework of a more fruitful kind of debate. In **Democracy and Education** Dewey attacked this very polarity:

'It is simply a product of abstraction, of adult reflection when we try to separate experiences into two parts, and distinguish between what the child learns from things and from people . . . There is no contact with things except through the medium of people. The things themselves are saturated with the particular values which are put into them, not only by what people say about them, but more by what they do about them, and the way they show they feel about them and with them.'

I would add, in the spirit of Dewey, that there is no educative contact with people except through the medium of things, and that the values of people are saturated with the things which enter into the orbits of their lives.

What Dewey did not say in this connection, though the ground for saying it is abundant in his writing, is that this false dichotomy is reinforced, is made almost unavoidable, by a conception and organisation of subject-matter which is the fruit of a long scholastic tradition.

In the scholastic tradition this organisation of accrued knowledge has been characteristically linear and sequential. The metaphor of the *course*, as a glance at the dictionary will prove, is overwhelming. Formal discourses uttered in real time are unavoidably one-dimensional. These link up in the endless march, trunk to tail—a march which dominates the tempo and rhythm of traditional schooling.

Fluent human understanding, by contrast, implies a richly interconnected network of ideas and stored knowledge evolved by abstraction from many passages of experience. Any node of this network has the indispensable virtue which the computer buffs call 'random access'. It can be reached from many other parts of the network without long marches.

## teaching young children

What the best traditions of early education have done in this regard amounts to major reorganisation of subject-matter—of things and of people, knowing and competent people—into a common and coherent framework. The sand and water and clay, the painting and writing and reading, the cooking and building and calculation, the observing and nurture of plants and animals are woven together into a complex social pattern which sustains romance as it extends a concern for detail and for generalisation. The association between things and people is intimate, their 'interfacial area' is large enough so that the polarity and separation between these two sources of learning is avoided. The organised discourse and the text do not disappear but they do not dominate.

This reorganisation, though incomplete and still mostly inadequate even for the early years, represents at least the beginning of a major practical and intellectual achievement. This is not usually recognised very much; teachers of the young are not usually regarded, by themselves or by others, as 'intellectual'. Their academic backgrounds are often modest and their knowledge of 'higher' subject-matter limited. Yet the skilful among them are able to see order and number, geography and history, moral testing grounds and aesthetic qualities in all the encounters of young children with the furniture of a rich environment. If such an achieved human character is not to be called 'intellectual', it yet argues a considerable intellectual

capacity, and one which could well be envied by those of us who have become imprisoned in the higher branches of learning.

## knowledge and learning

The extension of a similar style and conception of education to the world of older children, of adolescents and adults, must somehow work to satisfy this same condition. It is not a matter of 'teaching methods', but of the radical reconstruction of subject-matter itself. And this brings me to the second quotation from John Dewey. Here again, in *The Child and the Curriculum*, Dewey confronted the either-or of what is learned from things and from people; with the all too likely mismatch between the psychological order of experience and the customary logical order of codified subject-matter. He argued for a needed reconstruction of knowledge:

'It must be restored to the experience from which it has been abstracted. It needs to be *psychologised*; turned over, translated into the immediate and individual experiencing within which it has its origin and significance . . .

For the scientist, the subject-matter represents simply a given body of truth to be employed in locating new problems, instituting new researches, and carrying them through to a verified outcome. To him the subject-matter of the science is self-contained . . . The problem of the teacher is a different one . . . He is concerned with the subject-matter as *representing a given phase and stage of the development of experience* . . . what concerns him, as teacher, is the way in which that subject may become part of experience . . . Now the value of the formulated wealth of knowledge that makes up the course of study is that it may enable the educator to *determine the environment of the child*, and thus by indirection to direct. Its primary value, its primary indication is for the teacher, not the child. It says to the teacher: Such and such are the capacities, the fulfilments, in truth and beauty and behaviour, open to these children. Now see to it that day by day the conditions are such that *their own activities* move inevitably in this direction, toward such culmination of themselves. Let the child's nature fulfil its own destiny, revealed to you in whatever of science and art and industry the world now holds as its own.'

In these statements Dewey recognised, I think, that the separation and polarity of the two sources of

learning is *not* simply the product of philosophical error but an historical reality which can be overcome only by a thoroughgoing reconstruction. What has been partially achieved for the early years must be extended for the latter and this surely is not easy. How indeed is this reconstruction to be accomplished? Its aim is to increase what I called the interfacial area between organised knowledge and those kinds of fresh inquiry and experience which children can be led to seek and enjoy in a rich environment. It can be accomplished only through simultaneous reorganisation of knowledge itself *and* of the matching kinds of working environment where such knowledge has a chance to come alive.

## radical appraisals

The notion that we can achieve such worthy ends merely by 'curriculum reform' or by the improvement of teaching strategies almost guarantees the survival of that polarity and controversy which we would like to be rid of. It is not only the curriculum which needs reforming but the very systems and organisations of knowledge which it presupposes. It is not only the procedures of teaching which need attention, but the very nature of teachers' own involvement with subject-matter, an involvement which can make it possible for them to 'direct by indirection'. The whole argument of *The Child and the Curriculum*, long neglected, needs critical restudy from this point of view. I doubt whether Dewey himself was fully aware of its practical implications, of the magnitude of the task it sets.

For me personally it is a rare experience that I can disagree with our great philosopher of education; mostly the ideas I have laboured to evolve turn up, all freshness and innocence, in his pages. But here I think Dewey is wrong in one of his premises and thus weakens the conclusion he should have come to. This premise concerns the mind-frame of genuinely educated and investigative persons, persons who can extend our knowledge—in Dewey's example, scientists. For such a person the subject-matter of his science, Dewey said, is self-contained, a given body of truth used in locating new problems and organising new investigations. Such a person is not, by implication, prepared—as a teacher should be—to grasp subject-matter as related to different stages of the development of experience, to different ways in which it may become

part of experience. The gradient of such a mind is *from* experience to formalised knowledge, while that of a teacher must be the reverse. The latter uses that knowledge not for the purpose of extending it, but as a source for defining the environment of children, as a way of 'directing by indirection'.

## essentials of teaching

I think Dewey's description of the scientist is quite inadequate. He has left out half the story, the half which goes with the left hand and the right brain. Good scientists must in fact work in both directions, from the world of personal experience to that of public knowledge, and from the latter back to a restructuring and extension of personal experience. This does not mean that scientists are good teachers, heaven forbid. Some of them are and some are not. To cultivate a rich intuitive grasp of subject matter is not automatically to grow as a teacher. More is required for good teaching, but not less. A teacher must learn to resonate with the naïve perceptions and thought processes of those he teaches, to map these into his own domain of subject-matter comprehension. To do so he must have a wide, fluent and reflective grasp of that very subject matter.

If Dewey were right about the scientific mind I think we could rightly despair of ever achieving any reconstruction of knowledge in the interest of good and more widespread education. The scientist himself would be powerless to help us in the achievement.

But though Dewey's description of the scientific mind is inadequate, it does reflect an historical characteristic of modern science as a discipline. Professional science has become increasingly organised for the advancement, rather than the diffusion, of knowledge. Its discipline has tended to become more and more that of an army trained in mobile warfare, driving salients into the frontiers of the unknown. Its textbooks and training rigors can be interpreted in that light, as can its decreasing popularity as academic subject matter among the young.

But let us suppose this might all change. There are many reasons, in our world today, for thinking that it might. Let us suppose that some of the best scientific minds should become seriously interested, with scientific humility, in the deeper problems of education; that the advancement of learning should be seen, at this

stage in history, as a genuine broadening of its popular base, beyond mere 'popularisation'. Might this not be identical, this turn in the career of science, with the reconstruction which Dewey saw as essential? Can we imagine good scientists and good teachers seriously apprenticing themselves to each other to this end? This is not 'pedagogy' I am talking about, but a reconstitution of subject matter, a change in its focus and style, a recodification which seeks to maximise not—narrowly—the power of attack on new research problems, but the 'interfacial area' between organised knowledge and naïve thought and experience. I am not urging any abrupt reversals, but only a change in priorities. And of course there are good traditions to build upon, to which many of the ablest in science have already contributed. While, for example, generations of students peered dutifully at parameciums, D'Arcy Thompson's great **Growth and Form** lay neglected in the library. Not only is it gaining belated recognition as indispensable background for contemporary fundamental biology, but it is mostly quite open to delighted amateurs, teachers included.

## making learning accessible

Of course it is not easy to generalise across the whole range of the sciences, even in their relatively elementary (and most fundamental) parts. Still less is it easy to generalise from the sciences to other parts of the curriculum. I shall not try to do so, but only to end with a proposal. As many kinds of subject-matter are now organised, it is not obviously nor easily possible to transform the teaching of them to a more self-directed and informal style of work in schools. Under these circumstances we are rather likely to fall back into the old polarities. By one party the tradition of the formal course will continue to be seen as for the most part a dreary, ineffective and superficial 'coverage' of subject matter on its way to ossification. By the other party the advocacy of resource-based learning will be seen as a denigration of both rigour and discipline in the mastery of subject matter. What I would hope is that this old issue be buried and that we address, instead, the question as to *how* wider ranges of subject matter, of that stuff alluded to in curricula and syllabi, can be revived and reconstituted and extended so as to make it more diversely accessible and appealing to growing

minds, more interwoven in the texture of a rich school environment. Many devoted persons have worked and are working at such tasks, more I believe in Britain than elsewhere, but they have been a small and unsung minority. They should gain wider recognition and support, particularly those kinds of intellectual support which would extend their range of imagination and knowledge. For a century we have been committed to the universalising of education, but perhaps only recently have we begun to realise how inadequate to this challenge our own education has mostly been.

*David Hawkins wrote about primary education in Forum vol 12 no 1.*

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# Integrated Studies Project

## Arfon Williams

Hartford Boys School in Cheshire was a trial school for the Keele **Integrated Studies Project**. Mr Williams, Head of the new Humanities Department since 1970, discusses their experience over the past four years.

The aims of the project were outlined at a meeting to which all members of staff were invited. We agreed to participate as a trial school and undertook to run **Living Together** with the 2nd year and **West Africa** with the 3rd year. Teams were formed initially from the Art and Craft and Handicraft departments, as well as English, History, Geography, RE and Drama, under the leadership of the Deputy Head.

A good deal of hard work was put in during the preliminary planning stage—meetings were held during lunch hours, after school and holiday times, discussing the outline material, amending it, suggesting new material, methods of approach and adapting material to the school's needs.

In the early stages there was a fair amount of inter-subject bickering, a lot of heart searching and head shaking and prejudice. Complaints of time being wasted, the whole thing should be scrapped, loss of privilege, etc, constantly rang out; but eventually a team with a common purpose emerged.

With the help of an American Exchange Teacher, who was used to Team Teaching and Integration, we made a start in September 1969. Planning meetings were reduced to one or two a week per team, apart from the agitated panic meetings during lunch hours. Our American colleague constantly complained that shortage of money would severely limit our scheme, despite a small launching grant from the county.

The Project produced some friction in the staff room. The group in the corner, talking and arguing, tended to irritate the others. However, as time passed, the staff room began to accept the talk philosophically and, with the expansion of Integrated Studies and team teaching, more are becoming involved, either as members of teams or as specialist advisors or speakers.

The time allocated was 2 × 40 minute periods and 3 × 40 minutes for 2nd year, and 3 × 40 minute periods for 3rd year. The timetable was blocked and the time taken from the Humanities subjects—with the proviso built-in that the school could easily revert to separate subject disciplines.

The method of approach adopted was a lead lesson, usually factual with visiting speakers and films where

possible, and follow-up work in groups sometimes working on the same topic sometimes on different topics. Sometimes the lead lesson was varied—when studying Tristan da Cunha we used improvised drama with a cast of 120 boys plus staff in the darkened hall: we had a shipwreck and the stage acted as the island, volcano and all.

The follow-up groups were structured mixed ability—so many from each stream—selected by the team members. Their work included posters, drawing, paintings, graphs, models and written work.

Each time a section was concluded an exhibition was mounted in the school hall. Particularly 'good' pieces of work (the criterion being the amount of effort) were exhibited somewhere immediately. Continuous assessment on file and display work was implemented together with an end of year examination.

At first many of the more able boys disliked the Project—they thought it a waste of time, they were interested in passing as many exams as possible. The less able thought it was a 'skive' but became interested because of the variety of follow-up work, and they then made good progress. The remedial boys were occasionally out of their depth and at one stage were removed except for selected sessions.

The Keele material had already stimulated an approach to integrated studies and team teaching among an enthusiastic group of teachers when, in 1970, a Humanities Department was created and I became Head of the Department.

'What is Integration?' we asked, and looked at the following:

1. 'Nothing more really than an excuse for doing your own pet thing all day and every day.'
2. 'I've heard as many definitions as there are teachers who do it.'
3. 'Fashionable nonsense—those damned modern methods.'
4. 'It's too ephemeral. You can't test it, evaluate it—and if you can't plot it on a graph of distribution there is no point in considering it seriously.'
5. 'Have children to be bound in the straight-jacket of subject areas in order that they can be "taught"?''

6. 'Perhaps it is because we have far too long ignored the aesthetic content of education and concentrated upon narrow subject areas that our environment, natural and man-made, is becoming more and more painful to live in.'
7. 'Changing from formal to informal work is full of toil, tears, sweat and mistakes, but well worth the trouble in the end.'

Integrated Studies and Team Teaching are very much related—in fact we feel they cannot operate separately—because in an interest centered area of education we have to get away from the traditional classroom situation.

We had agreed to continue our trial period with Keele for another year. At times the Keele material was most unsuitable for use with all the children and we decided to scrap the West African Pack and design our own study unit on USA. We now had the confidence to do this. One of the team had spent a year in USA on exchange, and several had built up useful contacts for resources on USA. We had taken the stand that we were going to use Keele and not Keele use us, and we had full co-operation from them in this.

## deciding on aims

We discussed the aims of the course we were designing for our school and after much discussion we decided that the aims of our integrated studies course for our first three years should be: to provide the pupils with the skills to find out, reason and evaluate their findings, to communicate their ideas verbally and written to others and to be creative in their thinking and activities.

All the boys from the top set to the remedial set are now included in our courses. We have 120 boys per year group with six staff per year.

We use the Key Lesson—which is stimulating rather than factual. After the key lesson the boys split into either Friendship or Interest groups and then a team member conducts a mini key lesson with these groups. This is followed by discussion on the initial task sheet and suggestions for secondary task sheets. The task sheets operate with numbers of sheets, books, magazines, slides, tapes, etc, relating to a particular area of study—the tasks or questions are arranged so that the pupils follow a progression—discovery, reasoning, analyses, conclusions.

The topic dictates the type of pupil group—Friendship or Interest. We use Friendship Groups for all year topics (eg Civil Rights) and Interest Groups for particular topics (eg Transport—Railgroup, Road, Air, Sea, etc).

The group work is brought together in a Teach-In when children report their findings through display, drama, discussion, verbal accounts, etc. During the Teach-In members of the team prepare questionnaires, based on information given in the Teach-In and Group Sessions, which are given to the children to test recall of knowledge. We have found—and are now happy after the initial shock—that the children retain more from their peers than staff. After all, that is something that integration brings about—it's a joint learning process with staff and pupils working together.

## assessment dimensions

We assess progress with continuous assessment and questionnaires. We base our continuous assessment on social and work factors—whether a pupil usually/sometimes/rarely perseveres, obtains materials and works, shows initiative, etc, shows concern for others, exercises self-control, abides by group decisions, etc. We assess basic skills, content of work, ability to express an opinion, social awareness, general attitude and involvement, personal and social confidence, imaginative and creative skills, the ability to pursue an enquiry. We use two grades (one for effort, one for attainment) and comments folders; group leaders keep record sheets, teams discuss assessment and standardise marking. The pupils are orally questioned and hold discussions, they have written tests—mainly questionnaires but also essay type, arrangement of given facts in graph form, logical arrangement, multiple choice, etc.

We are not timetable as teams for planning and so we hold our meetings after 3.45 pm. As the scheme has progressed we have found the meetings have become slightly shorter. Planning meetings deal with material, children, organisation problems, etc. We find we must plan in general at least 12 months in advance and in detail at least six months in advance. We have found that we must plan more than we need because if something is not going very well we must be prepared to scrap it. It is very hard to do this sometimes, but we try to put the children first. However, this does not mean we do not play it by ear.

In a planning session we may have to decide whether to take a theme or study individual topics and develop from there. When we deal with **Living Together** we deal with a local study first—children come to understand their own society first and then move from the known to the unknown. The local study provides areas that can be studied in Tristan (simple society), Borneo (primitive society) and China (complex ancient society). The areas are family homes, law and order, customs and beliefs, work, transport, communications, leisure, education. We have found that the China material is sometimes rather difficult and so we concentrate on creating a dramatic display—Chinese Festival. The children write poems in the Chinese manner, experiment with music, attempt Chinese theatre portraying legends, paintings in the Chinese manner, etc. They look at the role of the storyteller and make dragons (life size), lanterns, kites. The school hall is transformed into a Chinese village celebrating a spring festival with the children dressed in pyjamas and wearing Chinese hats. The celebrations are suddenly disrupted by a group of boys throwing off their tops to reveal battle-dress; revolutionary speeches are made and the school disturbed by 120 children chanting and waving red books. Discussion follows and an attempt to understand imperial and modern China. The team on the whole believe that it is all a very worth while exercise for both staff and children.

## **a common course**

Now all pupils follow our integrated humanities scheme in their first three years. Old subject empires have vanished and we are moving towards a situation whereby team members are integrated. However, RI has departed from the integrated scene because the staff concerned felt that the subject was not having a fair crack of the whip. More departments have become interested and correlate at suitable times in our scheme. The Art department in particular and the Science, Music and PE departments all add considerable depth to our studies.

Integrated studies in the 1st, 2nd and 3rd years occupy  $8 \times 40$  minute periods per week in blocked time, while  $3 \times 40$  minute periods for sets 1 and 2 and

$6 \times 40$  minute periods for sets 3 and 4 are devoted to 'basics' (mainly English). In the 4th and 5th year we have developed a number of Mode 3 CSE courses—English (English language and literature certification), History, Geography, Social Studies. We hope this will develop into a multi-certificated Integrated Studies course, and we have had the confidence to operate these courses because of our work lower in the school.

Physically the school is not designed for integrated studies: our rooms are far flung in all corners of the school, but during our block sessions we have the use of the school hall, library, remedial room, art room and two classrooms. However, we are attempting to concentrate the Humanities rooms in one area centred on the library and build up a central reference area. We have recently obtained the services of a typist/resources organiser so our tasks will become a little easier.

We feel that the children as well as the staff have benefited and are continuing to benefit from our new learning situations and that it is all really worthwhile. We no longer have complaints from the more able—they see how important the skills of discovery, reasoning, evaluation, reporting, communication are. The less able are far more confident, and the remedial boys respond to the stimuli and grasp concepts that previously seemed out of their reach. In fact, relationships between less able and more able have been helped all round—the children are far more confident, self-assured, able to deal with problems and *all* feel they have something to contribute.

Our start as a 'trial' school led to a good deal of curriculum development in the school itself. We are now beginning to hold planning sessions with the children in which they will participate fully in designing future schemes and topics of work. Parents, too, are becoming more interested and we are holding soon our first Integrated Studies evening in which they will participate.

We have found that the team situation has been beneficial to every member. Now we all have the confidence to plan our own 'schemes', use published materials to supplement our own and not rely on outside props too much. We certainly believe that published materials should suit the needs of the school and not the reverse.



# Man: A Course of Study

## Ron Morgan

A late entrant to teaching from industry, Ron Morgan taught in a grammar and then a comprehensive school before joining the staff of Madeley College of Education where he established the curriculum studies department.

Together with Staffordshire LEA, Madeley College of Education has been involved in introducing **MACOS** into schools during the past academic year. Since new projects proliferate like mushrooms overnight, an account of yet another might hardly be thought compelling reading. What is the special virtue of this one? In this comment I hope to suggest that it is highly distinctive both in content and style, and may well prove to be the most significant innovation of the 70s. First a description and then a comment about the effects on children and teachers after it was implemented.

The project is a social studies course aimed at the 9-13 age range providing 120 days of teaching. Its content is the study of man, its viewpoint mainly anthropological. Peter Dow, the leader of the development team, describes the course in these terms:

'The aims of **Man: A Course of Study** are twofold. First, we wish to stimulate children to think about the nature of man by providing them with interesting studies of animal behaviour and human groups taken from recent work in the behavioural sciences and anthropology. By comparing man to other animals and by studying man in a cultural setting different from our own, they may reflect upon the deep structure of human experience, the common impulses and ways of coping with life which unite man as a species beneath the surface diversity of culture, and the biological ties that unite man with other living creatures.

'Second, we hope that through this course children will come to understand that we regard as acceptable behaviour that which is a product of our culture. In judging others, particularly those from different cultures, children must learn how their judgments, and the judgments of all men, are shaped by the culture in which they live, and they in turn can shape their culture.'

There are four sections for study: The Pacific Salmon; The Herring Gull; Baboons and the Netselik Eskimo.

However, this apparently bizarre juxtaposition of content is not its main distinctive feature. There are three ways I think in which it merits the attention of teachers. First it is both an embodiment of Bruner's ideas as expressed in **The Process of Education** and **Toward a Theory of Instruction** and possesses highly structured materials which are underpinned by con-

cepts from various disciplines, such as sociology and anthropology. Second the core of ideas is presented through the medium of specially made films. Third, an obligatory training scheme is provided to ensure that the structure of the course is understood by practising teachers before any material is sold.

## Bruner's theory applied

The first of these, the translating of theory into practice, is an application of ideas which developed from a post-sputnik science conference in America in 1959. Here, spurred on by the dramatic evidence of Russian technological advance, scientists met to see whether it was possible to accelerate the transmission of knowledge from the researcher to the classroom floor, and so train more effective scientists. Bruner comments: 'For the first time in the modern age, the acme of scholarship, even in our great research institutes and universities, was to concert knowledge into pedagogy, to turn it back to aid the learning of the young.'<sup>2</sup> One result of this conference was a great spurt of curriculum renewal which had nothing to do with defence policies but with a re-examination of the effectiveness of teaching generally, and of social studies teaching in particular. The concern to translate advanced thinking into teaching led to Bruner's conception of the 'spiral curriculum' whereby the most generative ideas are distinguished and presented and represented to children in increasing complexity as their understanding grows. In **MACOS** some of these generative or organising ideas are seen to be 'life cycle', 'structure and function' and 'innate and learned behaviour'. These spiral through the course from salmon through to Eskimo. For example, with the first unit, salmon, we see life cycle as the focusing idea expressed in tracing the pattern of birth and death. Children note the five-year life cycle, the production of 6,000 eggs from which only two will survive to reach the sea, and the return of the adults, who spawn imme-

diately before their own deaths. This study also poses questions about innate and learned behaviour, for, with young salmon being unable to learn from parents, all the survival information has to be built into the egg. The next sequence, Herring Gull, shows the beginnings of a family structure, and after this the Baboon study reveals quite a complex social organisation. In this way key ideas are woven into the fabric of the materials to lead to a consideration of five humanising forces: language, extended childhood, social organisation, world view and toolmaking. These are five distinctive elements which Bruner has isolated as being contributory to man's humanness. They clearly only fully apply to the latter half of the course when the Eskimo are presented for study. However, by this time, as children note the interaction of animal and man, via seal, caribou and dog, it is hoped that the nature of what it is to be human is emerging and that by seeing the structure of a fairly simple hunting culture the framework of their own will be apparent.

## function of film

The second feature, the central position of film on the course, is most important. In all, there are 6½ hours of film available in 22 cassettes, less than half of which is devoted to animal studies, the rest to Eskimo. Professor de Vore of Harvard and Baliki of Montreal made special field expeditions to make respectively films of Baboon in Africa and Eskimo in the Arctic. 220,000 feet of film were shot from which the edited versions were finally made. Much of the film is shown without commentary so that children are continually being posed questions as to why certain behaviours are being presented. Such question posing, it is hoped, will lead them to find the answers themselves in the support literature, a miniature library of which is provided. The presence of so much film is further an acknowledgment of Bruner's remarks in **Toward A Theory of Instruction** where he refers to modes of representation from which we all learn—enactive, iconic and symbolic. These are respectively learning by doing, by looking, and by reading or listening to the spoken word. Perhaps in school we tend to give too much emphasis to the symbolic areas to the detriment of others. The balance is usefully redressed here giving more scope for those whom experience suggests are more visually than symbolically literate, so that the

less able have an immediate purchase on ideas which through literature alone they might not so easily grasp. The provision of a number of paths to the desired goal is also seen in the caribou and seal hunting games and in the suggestions for the construction of tools and models so that children are able to interpret another culture as creatively and imaginatively as possible.

## Seminars for teachers

The third factor, the training scheme for teachers intending to use the project, provides an obligatory forum where the basic ideas are tested out in workshop sessions. These are embodied in part of the course literature 'Seminars for Teachers', which contains selected readings and suggested activities designed to give insight into the course construction. As a result of this, although it is not expected that this training will give all the answers, the teacher will at least feel confident that he knows the purpose of the course and have available locally colleagues who have shared his experience. This is often not the case with the majority of projects because they are not normally sold to school clusters as they are intended in this instance.

## school responses

So much briefly for the content of the course. Does it work? Our experience at Madeley is naturally limited. The practice of the curriculum studies department has been to buy materials for the resource bank, introduce them into schools after consultation with advisers, and to teach them alongside the teachers. My own experience is of teaching the lowest ability 13- and 14-year-olds in a comprehensive school for three hours a week during one term. In this instance the form teacher felt that the class response was significantly greater in terms of interest and work production than in other lessons. Clearly the children had enjoyed learning, but valid conclusions from this are questionable considering the two teachers to one class, new personalities and new attractive materials. However, with other colleagues in other schools similar responses were recorded from both staff and pupils, and at this stage we considered that the materials were moderately successful.

Of more importance probably are the first responses from the cluster of five schools which taught the materials following an in-service course and financial support from Staffordshire. After one year the teachers are highly satisfied with the work output and the response of the children. In terms of curriculum organisation each of the three junior and two secondary schools has varied in its style. Initial reactions suggest that team teaching has proved to be the most effective approach to date and that a period of 80 minutes is the minimum requirement for the set of activities suggested.

In terms of staff collaboration between schools a marked change has come about. Prior to the implementation of the project there had been contact between staffs concerning transfer factors and such issues as primary and secondary French. However, these tended to be of a rather formal nature. The position now is that a much more informal atmosphere exists and far greater contact is maintained between the schools. These discussions relate not only to the MACOS materials but are also beginning to involve wider curriculum issues. It appears therefore that the project has been a fusing agent and the teachers concerned consider this to have been a desirable outcome. This has resulted from the need to share materials—each school being allocated a specific day per week for the films—and possibly because the teachers were exploring the work together, both on the in-service training and with the actual teaching.

However, such a result might have come from shared bingo activities. What of the measurement of educational outcomes? There is very little evidence available here. At present we have been unable to monitor the results in any analytic manner, so we do not have adequate information regarding the acquisition of skills and concepts by the children. The learning of content is, of course, far more easily tested, as it is in most subjects, and indeed, it is probably what we measure most frequently. However, because Bruner's materials attempt to provide a structured overview of man's uniqueness it may well be that the full course will have to be run through before such analysis is available, and even then considerable

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research time will be required. If the final results echo the American experience then it will have been a very worthwhile project.

<sup>1</sup> **Talks to Teachers**—One of the handbooks of the course.

<sup>2</sup> **The Process of Education Reconsidered**. J. Bruner, 1970.

*The project is being marketed by Curriculum Development Associates of America, and disseminated in this country by the Centre for Applied Research in Education, Norwich, which is directed by Lawrence Stenhouse.*

# Discussion

## exmouth school's curriculum: a reply

If, as Robin Pedley says, the English prefer evolution to revolution, then Exmouth School is a typical English comprehensive school. Since the price of relevancy is change, wherever we are in education there are pressures to be elsewhere. Exmouth School chose means towards the goal of being a real comprehensive school which may be less spectacular, but ultimately may prove to be more effective and efficient, than the expedient of adopting other schools' solutions uncritically. At an earlier stage of its development the school identified its own particular problems (and not just symptoms of them) in terms of where it had been, where it was, and where it wanted to be.

My report in *Forum* (Summer 1972 p. 73-75) was intended to show how far a large school, formed by the amalgamation of three very different schools, could get in three years of operation. My intention was a description and appraisal of the facts as they stood; because during my year of secondment I came across a lot of so-called comprehensive schools (usually ruled by an insulated head) which, although they trotted out the right jargon and slogans, had been victims rather than masters of change.

I could have done a whitewash job and made valid claims for the Middle School at Exmouth by saying that the pupils continued with a balanced common curriculum covering the fields of knowledge such as used in *Schools Council Working Paper No 45* namely Literacy, Numeracy, Physical Environment, Social Environment, Moral Sensibility, Aesthetic Sensibility, Creative Sensibility and Physical Education. However, as those people who work in comprehensive schools know, it is in the practical expressions of these areas within the operative curriculum that the 'hidden curriculum' lies. Selection occurs within comprehensive schools not only over matters of initiation (to use R S

Peter's term) of the pupil to the same broad area of curriculum but also over the matter of the level to which the individual pupil is initiated and allowed to develop.

I think most people, Jane Thompson included, tend to accept Exmouth Lower School Curriculum because it sounds egalitarian. However, Exmouth School's Curriculum Study Group would question that assumption in terms of what actually occurs in the teaching and learning of each subject. To take one example only we could look at the position of foreign languages, the setting of which Jane Thompson appears to allow by omission. Why is it that in common with lots of comprehensive schools all pupils tend to start French in the First Year but only a minority continue with it into the Middle School? What has happened during the teaching/learning process, either formally or informally, to cause pupils to be rejected or themselves to reject a subject for subsequent study which could have repercussions for their overall balanced curriculum pattern—and indeed their whole future course of study? This is an area for concern for policy makers rather than with inventing more 'attractive euphemisms' to attach to the word curriculum.

The logistics of the curriculum is another area. Although a large school can give high priority to operating a dazzling option system in the Middle School, it is only done at a price. With a fixed staff/pupil ratio it usually means that the Lower School is robbed, resulting in large teaching groups to allow small teaching groups to function for the more exotic 'subjects' in the Middle School curriculum.

Also I have become somewhat suspicious of the words, 'options', 'choice' and 'self-selection'. As I have already said above, if most pupils in comprehensive schools have a balanced curriculum, or as Jane Thompson puts it, 'exposed to the same prestige material', then could not the systems of options/choice be merely a rather elaborate and unnecessary conning

device to delude the pupils and their parents? If the pupils all end up occupied with the same fields of knowledge anyway (albeit with different subject labels), why don't the pupils also get other things they may *want* such as ending up doing the same level/status of work and achieving the same level/status of certification? Has not someone, somewhere, sometime, in every school, including those teaching mixed-ability classes, sent out signals to the pupils about attainable examination targets? What I tried to show was how Exmouth School faced up to such a problem by taking a realistic and responsible attitude and recognise the claims of the outside world. What I did not mention was that in the first year of the comprehensive school, in a dash of revolutionary fervour, a free-for-all option system as used in some established comprehensive schools was tried. It resulted in an inefficient system of teaching and learning at that particular time. Consequently, it was modified to the system I outlined, which in turn has been considerably altered for the present academic year.

I am confident that Exmouth School's curriculum will alter next year and henceforth. But it will alter not as a mere reaction to some situational crisis but rather as positive action in line with its systematic overall development plan as a typical English comprehensive school.

ROY HAYWOOD



# Science and the 9-13 Middle School

**Peter Prosser**

Having taught in grammar and secondary modern schools and in a college of education, Mr Prosser is now Headmaster of Cranborne County Middle School in Dorset. He has written about Nuffield Science in **Forum** vol 13 nos 1 and 3.

Since I last wrote about Science in **Forum**, I have changed from onlooker to practitioner, in that I am now Head of a 9-13 Middle School, and responsible for the development of Science within a more or less integrated curriculum. Nuffield Combined, and the Nuffield Secondary Project materials are spreading steadily through the Science departments of secondary schools, and there is considerable evidence that these materials are being used on a 'workshop' basis, although often with the lower ability sets.

In Middle Schools the position of science is much less clear than it is in Secondary Schools, where it is possible to have a clear-cut course leading to recognised examinations. In the absence of any consensus about the study of science in the Middle Schools, provision and teaching vary enormously. The converted Secondary School may well retain a generous laboratory area, well-equipped with inherited apparatus; the converted primary school may end up with part of the room serving a laboratory function, and a very modest grant of simple equipment. The purpose-built Middle School often has a fairly well furnished laboratory 'bay', usually too small for its purpose (which has not been defined, anyway). The views expressed on Middle School Science in this article are my own, based on both secondary and primary experience.

I believe the children should have a chance to do work which they can recognise as serious science. This means that there should be an adequately furnished and reasonably large Science Centre, supplied with services and adequately equipped with apparatus—and enjoying the services of a technician.

The Centre will be equipped for the basic processes of weighing and measuring, microscopy, photography, testing of various kinds, and will have workcard programmes so that groups can work under adult supervision, from the time they come into the school at 9+.

At first, their visits to the Centre will be spasmodic, since each year-group area is equipped with a fitted Science trolley and there are project areas where a good deal of Science is done.

Much of our discussion ranges round whether adequate foundations for scientific work can be laid down within integrated studies. Increasingly I am coming to believe that for the future ordinary citizen, two things are of overriding importance in science teaching:

1. The philosophy and methods of scientific problem-solving are far more important to get over to the pupil than most of the content.

2. The scientific content should be relevant to the future needs of our pupils, and part of our influence on their philosophy of living.

For ordinary people, much of the traditional content of science courses is not relevant, is quickly forgotten, and even regarded with distaste. This is why I welcome the materials of the various Nuffield Combined Science Schemes, which enable us to *choose* the materials best suited to our needs. The Science 5-13 materials provide guidelines for the development of science by means of integrated study and topic work right through the Middle School.

## human and material resources

Provision of the material resources for science teaching is the easiest part of the business. Kits abound, and if one does a costing analysis of their contents, compared with buying the basic materials and putting them together, one concludes that some manufacturers, dealers and publishers are in an unholy alliance to gain benefit from the unsuspecting teacher. It is surprising how little costly apparatus one really needs—but it is equally surprising to find that there is money available to buy quite sophisticated equipment for Middle Schools where a case can be made. There *is* the problem of having on the staff a scientist with a sufficiently good background, and the experience, to make the right choices from the equipment available.

All the gadgetry now so readily available will not give rise to good and lively science in the school without the teaching. We are trying to avoid a 'bits and pieces' approach to learning science; almost all our teachers will be involved in teaching science, so we all need a common core of knowledge and skill. Wynn Harlen's book, **With Objectives in Mind** (Science 5-13), provides a rationale for all the science and should not only be read, but put into practice at all stages of our work; the hot debate surrounds the way in which adequately structured content can arise from integrated studies.

## four themes

If you remove subjects as the pillars and supports that give the curriculum structure, something is needed in their place, or the structure will collapse. We hope to provide four broad themes that will permeate eventually all our work, as the 'vertical pillars' of a four-year curriculum. The choice is arbitrary, but these are:

1. *Time*: a historical concept that can be developed from the intensely practical to the philosophical.
2. *Symbolism*: in particular two-dimensional representations of three-dimensional objects at different scales.
3. *Energy-exchange*: scientific concept, difficult to grasp, but vital to our lives and survival—and to develop an understanding of energy processes (however limited), rather than amass a catalogue of facts.
4. *Human relationships and resources*: in each year, topics of varying length will overlap and cross these themes in a planned way so that many of the central ideas will be returned to in subsequent years. To a large extent, the science experience will be planned to come out of this general topic work in what we hope will be an orderly way.

As the course progresses, the scientific component will become more and more clearly defined, and more clearly identified with the school's specialists, until towards the end of the third year, a course more formally labelled 'science' will emerge, to give rise in the

fourth year to a carefully structured course in science in preparation for work in the Upper School. Ideally, this will proceed at two levels: investigations and study in the Science Centre within a course based on the Scottish **Science for the 70s**, and more broadly based individual studies based on problems in the environment.

## how much structure?

It may be that we are trying to reconcile the imaginative growth of scientific ideas in a rather haphazard way with the orderly development of scientific methods and knowledge as traditionally done—and there is certainly an argument in favour of the less structured approach to science, which is imaginative, if only on the grounds that it is often the divergent thinkers who make progress! This is, I suspect, the mirror in our school that reflects the fluctuation in fortunes of the various Nuffield Schemes nationally. We have a kind of love-hate relationship with their philosophy, so we embrace their approach to first-hand activity and to individual investigation, while covertly modifying them to fit into a code of practice that makes us feel secure.

At the moment I am a coward. All my imagination and my theoretical knowledge tell me to abandon structure, to make science more akin to the art that it really is; but my professional conscience is more secure with a structure—with bounds, with sequence, with the Upper School and its external examinations; and that is why we have gone to such great pains to ensure that the science that comes out from our integrated courses is predictable and structured.

Perhaps in two years, when we have settled down, we shall be able to tell a more adventurous story; I very much hope so. But at the moment the science we do, will, we hope, be serious, relevant to the children's needs, and satisfying to them to take part in.

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# Archives and the Teacher

**G A Chinnery**

Mr Chinnery, who is Principal Keeper of Human History at the New Walk Museum in Leicester, has been helping schools to use archive material as resources for over ten years.

In the last five or six years, while resource based learning has been developing fast in schools, a parallel development has been taking place in museums in this country. Largely the changes have come about from within the museums profession. To a large extent, ten years ago the public had written museums off as places of interest, and with certain exceptions in the form of stylised visits, teachers made little use of them and were making less as time went on. This situation has now changed, public attendances at museums are rising, specialist exhibitions have stimulated interest, and, despite severe financial limitations many museums have launched out into educational waters not as passive recipients of demands from teachers but as active (some might say aggressive) salesmen who have wares to sell which they are convinced can be useful to teachers.

There seem two strands in this. First, a consideration of a museum as a storehouse of facts which are not readily available elsewhere, and secondly an outward going desire to make those facts readily available by all methods, not just by the traditional means of static displays. Of course some museums have been doing this for many years, but in many cases, diaspora has been more honoured in the annual report than in practice. In parenthesis, tactile or visual experience is as much a 'fact' for museum purposes as archaeological stratification. The newer thinking therefore on the method of deploying the resources of a museum for educational use involves a lot more than either providing displays in the building or operating a loans service to schools of cased or second grade materials and replicas. It is readily understood now that the 'reserve' collections, the behind the scenes material in a museum normally exceeds by a factor of 10 at least what is on display. In the case of some resources the factor is more likely 10,000. How can this enormous storehouse of material be made available not just to a few visiting scholars, but to schools and educational groups in the neighbourhood? We have on the one hand a desire by many teachers to work from first hand sources of experience and on the other various storehouses of such information. The coming together of the two is a natural

development. However the satisfaction of teachers and present educational needs is only one function of a museums duty; there are others and it may be that clashes occur, not all can be always smooth.

This article looks at one particular type of 'Museum' resource and how it is used. The particular objects described are not necessarily in your local Museum, indeed they may well be in the local Record Office (there is one in every English county) or your Central Library. They are chosen because they are all pervasive, entirely local in character and much misunderstood—historical documents. The cover of the DES pamphlet on Archives and Education is a formidable picture of impressive books and documents mainly of 16th and 17th century date. Even in the list work possible with junior levels is discussed in terms of the 16th century and earlier. Admittedly the pamphlet was written in 1968 but it is as if the 19th and 20th centuries had never been. Recent work has shown the existence of large quantities of material, basically archival in nature, which can be handled in bulk by most children at the top end of the primary school. Much of this is also useful for older children because the strategy of using it is not restricted to a particular age group.

What is the nature of this material? In essence it provides factual information about what people did or what the environment was like in the past. It just happens that instead of the evidence presenting itself for our attention in the form of houses or streets, castles or countryside, it presents itself in a two dimensional form as writing or drawings on some flat material. Yet the very idea of historical documents is wound about by a mystique and terror which it does not deserve. Nearly all the historical documents which survive started life in a mundane, practical way as part of the necessary mechanics of living. It just was not possible for our ancestors to carry on without paper work any more than it is for us. This applies to documents of all ages and importance, from Domesday Book—compiled as a necessary reference book for government—to a modern shopping list, from Magna Carta to a plan submitted to the Local Authority for building a new

house. Though made for immediate practical use this use is limited. The papers serve their turn and after a while, long or short, cease to have this practical use. Should they then be pigeonholed and forgotten for a while and not immediately thrown away and destroyed, they will come to light later on, in ten years or a hundred, invested with a different importance. They now form part of that artificial memory which mankind makes up of its actions—or rather of some of them—as it goes along.

When human memory has faded or died they will be the only evidence that things ever happened. Without such evidence any knowledge of what people thought and did is scanty. Most documents then will be trivial, humdrum, run-of-the-mill, but they have certain qualities which may commend them to teachers seeking material for resource based learning. For the last century and a half they will be legible, with little difficulty to any child who has mastered joined handwriting (and anyway a lot of documents will be typewritten for the last half a century). Also, they survive in large quantities—embarrassingly so. Indeed as the population of the country has grown, so has the paper work, and more of it survives. Much of this, relating to public activities, is still roosting in the local government offices in Town and Shire Halls, in UDC and RDCs, but in some case, and increasingly so, under local government reorganisation now in process, it is likely to find a resting place in a local Record Office whether this is a separate entity or attached to a Library or Museum. If this has already happened, or if it happens in the future, how can the teacher get access to records which may occupy anything from a mile of shelving upwards, and how can the teacher find out what is actually there, particularly if the school is at a distance? There exists a gap of knowledge between the archivist who has a knowledge of what he has got (not a detailed one amidst so much) and the teacher who knows to some extent what he wants to do if only he can get access to the resources to do it.

A number of Record Offices now have a member of staff specially designated to liaison work with schools and this number is likely to increase in the next few years. The first step therefore for any teacher who wants access to this resource material is to write or to phone the local Record Office (look under your County Council in the telephone directory) asking if they can

speak to the Education Archivist or the member of staff who normally deals with such enquiries. Once a meeting can be arranged the interchange of wants and information can begin. Whether the needs of the class are topographically based or subject based is immaterial. It is really the job of the Record Office, as a purveyor of information, to tailor what is provided to what is wanted as far as possible. If the school is at a distance from the Office it may not be possible for the class to make more than one or two visits and these can best be used to familiarise them with the sort of material and the way in which the information presents itself. Work back in the classroom may have to be carried out from Xerox or other copies. Some offices are developing 'banks' of copies from which the teacher can borrow. Others provide packs on particular subjects (many are on sale and have been noticed in **Teaching History**, the Historical Association's periodical publication). At a recent Conference on Archives and Education it became clear that there was no one way of deploying the resources of an office which was inherently superior to any other, but the initial personal contact was felt to be a vital factor. Of course there are still record offices and archivists who feel somehow that the information they have is too advanced or in some way unsuitable for children or that children are unsuitable for it, but these offices are diminishing in number. The response to a teacher's enquiry is likely to be a good deal more forthcoming than it was even five years ago. The only difficulty which now presents itself to many offices is that once demand is unleashed the office can well be overwhelmed. The staffing of offices has not, and for many years will not catch up with the new demands and teachers may well need to be sympathetic to the office's difficulties. However, this great body of material, the real raw material of the past, is a resource which teachers can use now. Knowledge of how to use it and its limitations will come with use, an early casualty usually being the confining walls which still define 'history' as a subject in a large number of cases. Any subject which has a dimension of time and which deals with a human activity is likely to have left a trace in the records and it is this store which is now being added to the teacher's armoury of educationally useful material.



# A School Resource Centre

## Malcolm Holder

A few years ago Malcolm Holder was seconded from his teaching post to work with the York General Studies Project, and has since set up a Resource Centre at two schools—Don Valley High School and Codsall Comprehensive. He has just been appointed Deputy Principal of Abraham Moss Centre in Manchester.

In the last few years there has been a strong growth in resource based learning. The real danger in this development has been the lack of essential resources to service the pupil and the teacher. Libraries have in many ways failed to meet the challenge of this multi-media approach, and the recent growth of Learning Resource Centres (LRC) has been seen as the most effective way of servicing resource based courses. LRC have developed a wide variety of styles and forms but any truly successful centre requires certain essential ingredients.

Perhaps the most essential ingredient for any resource centre is adequate staffing. To allocate a senior member of staff a few periods each week shows a lack of understanding of the real potential of a learning resource centre. Certainly, a senior member of staff is required, one who can work with Heads of Departments on an equal professional basis, have some influence upon their thinking, generating interdepartmental activity and encouraging staff to make a serious re-appraisal of their teaching. Time is essential to enable him to mix with staff, and run in-service training courses. The amount of time required will vary according to the size of the school but any establishment with at least a thousand pupils must have a Director with at least two-thirds of his timetable at his disposal. He should still be actively involved in the teaching, working alongside his colleagues, showing by example, helping probationers, advising students, demonstrating an alternative learning technique, involving himself in planning sessions and departmental meetings. This involvement will give him a thorough knowledge of what is going on in the school and enable him to spread his knowledge in other areas where there is perhaps less innovation. It is sad to think that there is so much expertise and skill in a school yet it is often never shared with other colleagues. A diplomatic resources director can often discover this expertise and encourage others to use it. He may open classroom doors that have remained closed for far too long.

No Director can hope to cover every aspect of the

LRC work and it is essential therefore that he has a number of assistants. Such support will also ensure that there is continuity should the Director leave. Assistants need to have their own special interest which they can usefully develop in the in-service courses. Many staff rooms have a keen photographer, or a keen 'vis-aids' man, and such enthusiasm needs to be encouraged and developed at a professional level so that the whole school benefits.

## ancillary services

The professional staff in the LRC must have the support of ancillary services. All teachers require secretarial and technical assistance if they are to perform their professional tasks effectively. Resource based learning requires efficient reprographic and audio-visual services and these have to be run by qualified ancillaries. The larger school will certainly need a Media Officer, perhaps of the ILEA type, who will be familiar with educational technology, and a team of assistants to be responsible for the production and servicing of resources. Perhaps we have concentrated for too long on the message and forgotten that the medium is an essential component of the learning process. The pupil is exposed outside the school to a highly professional mass media, yet in too many schools he still faces a scratched, faded blackboard or a streaky worksheet smelling of spirit duplicating fluid.

Such support for the teaching staff does not automatically mean that there should be a large increase in the allocation of ancillary services. Many schools must look seriously at their present staff and evaluate its cost effectiveness. Perhaps the Domestic Science ancillary who cleans cookers, etc, is not as essential as a teachers' secretary for the whole staff. Such decisions are still left up to Headteachers and the LEAs, but perhaps the teachers and their unions should assess carefully conditions of work. How can we ever be a fully effective professional body when we still not only create and

design our own resources but then have to make them? Resource based learning will never be effective without the appropriate support from educational technologists.

A well-organised learning resource centre team will mean that the reprographic and audio-visual services in the school are effectively organised. A LRC must service all styles of teaching and where this involves the wide use of source material it is vital that all aids are working and properly maintained. Moreover, staff need to be taught how to use them and produce the material to accompany the equipment. Many schools have been filled with the latest in educational technology but this is no guarantee that effective learning will be the result. Too often equipment remains in store cupboards because staff have not had the necessary training. It is not surprising therefore that many teachers reject new learning possibilities because it is too much trouble and often impossible to keep pace with rapid technological progress. Staff must be given time in school to re-train and keep up to date with new styles of learning.

## **democratic control**

Efficiency can only come through a centrally administered system. This does not necessarily mean a physical centralisation since in many schools because of the nature of the buildings this would be a disadvantage. Moreover some equipment is not suited to excessive movement. Such expensive aids need to be purchased by the school and not piecemeal by separate departments. The reprographic services too need to be centrally run to guarantee efficient service and a high quality of production. This suggests that a representative LRC committee for such aids has to be established to advise the resource director and the Headmaster about the needs of the whole school. Staff participation in the running of the Centre is to be encouraged and will result in a much more informed and enthusiastic staff.

But if there is to be effective resource based learning then we must have the facility to experiment. Experi-

mentation costs money and there are bound to be failures, and this innovation and curriculum development must draw upon the school finances. This means that the Headmaster must invest staff and money and to some extent gamble on a short term loss producing a long term gain.

## **a training service**

He can, however, safeguard his investment by making sure that his staff are effective. This he can ensure by a policy of in-service training in the school as part of the programme of the LRC. This is the most crucial part of the whole process. Effective resource based learning can only be achieved by staff undergoing a thorough programme of in-service work, with opportunities for learning new skills and time in school to actually create their own resources suited to their needs and those of the pupils. Teachers will have the opportunity to see what their colleagues are doing, to try new techniques, to see what services are provided by the LRC, and to work closely with the technical staff in the production of their own material. To create teaching material, following it through all its stages of production and then finally using in the classroom is a rewarding experience that most teachers will enjoy and find professionally stimulating. Such opportunities are vital to a professional body if it is going to be innovative.

If resource based learning is going to be effective a school must re-think its total resource involvement. Human and material resources are totally inter-dependent, therefore any resource system needs to ensure that both these elements are mutually productive. Far too often in schools they work against each other producing learning environments that are not very effective. A well-organised LRC built into the school system, primarily to service the school, will produce a very efficient resource based learning environment and at the same time produce a much more skilful and professional teacher.

# Five Schools and an Estate

## Paddy Netscher

Senior Master at Abbey Wood School, Mr Netscher is chairman of the Primary-Secondary School Liaison Committee which has pioneered an experiment in cooperation between the comprehensive and its neighbourhood primary schools.

Abbey Wood is one of many London comprehensive schools, but the situation regarding our contributory primary schools must make us almost unique; there are four of them within half a mile of us, and almost all our annual intake comes from these four.

This means that we five have a rare opportunity; we can consider the education of the children on our estate as a continuing process from 5 to 16, and it is possible to set up structures which allow close and frequent contact between primary and secondary teachers. We have, at the moment, two such organisations.

## The Liaison Committee

The Abbey Wood Schools Liaison Committee was formed some four years ago, and aims to provide as many such points of contact as possible. It is a loose, informal body—it meets regularly, and publishes minutes, but has no written constitution or terms of reference, and its membership may change from meeting to meeting. But its major characteristic is that in origin and development it is a grass roots organisation—the initiative for its foundation came from the comprehensive school's Common Room Society, and not from any of the heads. And even now, when it is well established, the present heads deliberately do not, as a matter of policy, serve on the committee or attend its meetings. It has, however, their trust and support.

I am Senior Master at the comprehensive—I happen also to be chairman of the Liaison Committee, but this is, I believe, only because the committee is an active body and finds it convenient to have as chairman a contact man who is so placed that arrangements can be made smoothly and quickly. The other three representatives from the comprehensive are nearly always junior members of staff, as are the representatives (one or two each) from the primary schools.

At the moment, we seem to be organising four major annual events:

1. Early in the Spring Term, we have an Interschool Concert—the fourth year pupils at the primary school and our first year pupils (who are, most of them, old boys and old girls of these primary schools) come

together in our hall to entertain each other and as many parents as we can squeeze in. Logistically, this evening appeared to be an impossibility when first mooted, but in the event, the problems of dealing with a large hall crammed with excited children, all of whom doubled as audience and performers, manage to solve themselves, and considerable goodwill is generated. A small charge is levied on the parents, and the proceeds split four ways between the primary schools.

2. We hold a mini-open day later in the same term, when children in the last year of their primary schooling and their parents can visit us *before* coming to a decision about their choice of secondary school. In recent years, the Inner London transfer system has been the subject of much public criticism, and this preview open day is now Authority policy for all its secondary schools. The only difference this has made to us is that details of our mini-open day now go to every parent of a fourth year primary child in the educational division—but the majority of the parents who actually come are from our own four primary schools. And as we are inescapably a community school, this does not worry us. What is important is that the day is of obvious value to the many who do come.

3. We organise a 'Link Meeting' very early in the school year. The previous year's fourth year primary teachers and the tutors of the first year groups at Abbey Wood meet to discuss their charges in as much detail as they feel each child needs—whether the child has survived the transfer successfully, confidential details of background, problems, weaknesses, strengths and aptitudes that might go unrecognised until much later. There is, of course, an official 'feedback' system, but it happens in the second year of secondary education, and many staff feel that it is cumbersome, time-consuming and in many ways ineffectual. We are aware of a strong and urgent need for a more immediate and personal flow of information, and these link meetings have provided this. They are considered so valuable that primary teachers who have changed jobs and left the neighbourhood have gone out of their way to return to link meetings which have concerned them.

4. We are developing a system of staff exchanges between the comprehensive and the primary schools. We can see two possible advantages—it will give the secondary teacher first-hand experience of the problems and rewards of his or her primary colleague, and vice versa, and also permit yet another exchange of information, advice and expertise about individual children.

But our self-imposed brief was, of course, much wider than this. We aimed at establishing contacts at as many points as possible, and so we have also arranged subject and topic based meetings which provide opportunities for assessing and evaluating teaching techniques and curriculum content. In fact, it seems to me that this is the way in which the committee must now develop—initiating such projects as the determination of educational priorities and subject content. Perhaps there might be a case for some form of agreed syllabuses in certain disciplines. We have devoted much time and effort to supporting and fulfilling our pastoral responsibilities, but we have scarcely begun to consider systematically the ways in which we can, as five separate groups of teachers, become an effective unit in a tailor-made educational system for our children.

## **The Media Resources Centre**

The ILEA decided some years ago to strengthen its audio-visual aids programme by expanding the career structure of technical assistants in schools. It now has a body of Media Resource Officers, and we had one appointed to Abbey Wood School. Certain departments, of course, already had the help of specialist technicians, but the MRO was given overall responsibility for audio-visual aids and material and equipment, and the job of developing and expanding this aspect of the school's educational programme.

It seemed to us that here again was an opportunity to offer a service to all the schools on the estate. With the active support and encouragement of the Inspectorate, our MRO and the heads and staffs of the five schools, we are now in the process of setting up the Abbey Wood Media Resources Centre.

Four major problems emerged:

1. Provision of adequate space. Clearly, it was most convenient to site the centre at the comprehensive school. It was the largest, central to the region, and the MRO was assigned to its staff. But space was at a premium, and it was with some difficulty that we

managed to negotiate the release of a large classroom. But we did, and it is now slowly being adapted.

2. Provision of adequate staffing. It was clear that one MRO could not manage on his own. We needed an assistant, a librarian, and some form of clerical assistance at the very least.

3. Provision of running finance. This proved to be the least of our problems. Relations between the schools were such that it was agreed that expenses would be met by each school reserving part of its capitation allowance for this purpose. The extent of each school's contribution would be calculated on a simple per capita basis of 25 pence per pupil per annum—this allows us to budget for an expenditure of £800 to £900 a year.

4. The provision of a capital sum to initiate the project. This has proved a major headache. It is possible, without much difficulty, to produce a shopping list for large items of equipment that totals well over £5,000. An electronic stencil cutter, a couple of videotape recorders, a three-colour duplicator—we are already well over the £1,000 mark. Major fund raising activities could help, but we expected the Authority to provide a lion's share of this money, particularly in view of the encouraging noises it had made in the early planning stages. We have had a long and frustrating wait—I LEA has been considering the proposal for well over six months, and we still have no firm indication of the support it will offer us.

At the moment, then, the Media Resources Centre does exist, but unofficially, and is crawling along in a very low gear. The MRO has commitments to the comprehensive school and its staff, and without assistants on the scale I have indicated, the amount of time he can devote to forward planning and preparation is necessarily limited.

The control of the Centre will lie in a Management Committee, with members from the staffs of the five schools. The chairman of this committee is on the staff of one of the primary schools. Unlike the liaison committee, the management committee of the centre has very carefully drafted terms of reference, which had to be ratified by the heads and staffs of all five schools because of the financial element involved.

So there it is. The structure exists, the room is there, and everyone concerned at the five schools is prepared to change gear rapidly as soon as we are given the green light by County Hall. But we find this enforced wait a very frustrating period indeed.

# Preparation for Provision of Nursery Education

**Douglas Hubbard and John Salt**

John Salt of Sheffield Polytechnic has previously contributed to Discussion pages in **Forum**. Here he collaborates with Douglas Hubbard, of the University of Sheffield Institute of Education, to consider some implications of preparing for an expansion of nursery provision.

'The action the Government now propose will give effect to these recommendations. Their aim is that within the next ten years nursery education should become available without charge, within the limits of demand estimated by Plowden, to those children of three or four, whose parents wish them to benefit from it.'

(A Framework for Expansion, Section 17, p. 5.)

As the above quotation suggests, the education of the pre-school child is now recognised as a major national concern. In an important sense the battle for pre-school provision has been won, and there are few who would not applaud the victory. On the other hand, there are perhaps equally few who would not recognise that, in the light of the mass of analysed information about the impact of education which has accumulated in recent years, provision in itself is not enough. Increasingly, in fact, has come to be realised that education is likely to exert its optimum influence only when it is seen as part of a wider process of social persuasion. When, for instance, there is an essential conflict between home and school, the educational institution tends to come a very poor second.

Now it is, of course, quite true that the extension of nursery education is intended to overcome just those problems of deprivation, estrangement and alienation that have been hinted at above. In its broadest aspect it will provide a richer basis of experience—emotional, sensory, social—for tens of thousands of three- and four-year-olds; and that, it might be argued, cannot be possibly bad.

It is when we come to look at the more precise objectives of nursery provision, however, that we come to realise that there are issues at once more fundamental and more complex than might hitherto have been suspected, issues the recognition of which graphically draws attention to the shortcomings of mere structural provision and suggests that the sociological 'truths' derived from the study of other forms of education are equally applicable to that of the under-fives.

As the White Paper states so trenchantly, the time has come to raise our sights generally in respect of

expectations of nursery education, and the list of objectives now appears formidable. Indeed it would be difficult to see how any of the following could be taken out, and there may well be readers who would suggest significant additions:

1. Children should develop favourable attitudes to basic educational skills of play.
2. Additionally, they should develop skills in the exploratory use of toys.
3. They should learn to make friends, acquiring, incidentally, a facility in making effective contact with an increasing range of adults.
4. They should have experience in listening to frequent and regular use of the spoken word as a means of instruction, entertainment and control. They should be acquainted with a number of 'codes' of speech, some relatively rudimentary, some more complex.
5. They should have an increasing ability to articulate the experience of home with that of the school.

A formidable list indeed—and one which requires a thoroughgoing structuring of experience. For the children of the less-favoured social groups this is likely to represent a penetration into a relatively new world. For others, however, it represents a reinforcement, and a powerful reinforcement at that, of what American sociologists have come to call 'the hidden curriculum of the home'. And here there arises the first major question to be posed: whereas there can be little doubt that the *general* impact of the extension of nursery education will be to raise standards, is it not possible that this extension will provide yet another illustration of the educational maxim of 'to him that hath . . .'?

There are, in fact, a number of considerations here. In the first place it might be pointed out that educa-

tional deprivation, like poverty, is relative. What appears to be equal provision can indeed mean the long-term creation of even greater social inequality, as the experience of the social services has tended to suggest.

Nor is it simply a question of knowing what is being offered, appreciating its nature, and taking it up. As has been graphically pointed out, the middle-class home, in general, not only gives, both consciously and unconsciously, a deep background of support for educational experience: it also in many ways prepares both mother and child for initiation into that experience.

## widening the gap

In these circumstances, then, is it not possible to see what, in relative terms, might come to be regarded as the 'super-deprived' child? **A Framework for Expansion**, it will be noted, does not promise nursery education for all, but only 'to those children of three and four whose parents wish them to benefit from it'. If generalisations deriving from other areas of social provision are applicable, it is largely the children of the *very least* favoured social groups who are most likely to be deprived of the opportunity of pre-school education. And yet this is not the main point. For even if such children were recruited in very large numbers, there would still exist dangers of estrangement and alienation. After all, in the vast majority of cases the children will have spent three years or more in homes whose distinctive attitudes, speech forms and behaviour patterns are, in normal circumstances, very difficult indeed to reconcile with those of even the most easy-going educational institution. In the new age problems of linguistic deficiency, motivation and social control may well be met earlier in the child's life: they will not necessarily be solved thereby.

## nursery teachers' courses

Clearly, there are important questions to be asked in respect of the recruitment and education of nursery teachers, and, clearly, too, the discussion will necessarily be superficial unless we face up to the question as to whether there are important aspects of the essential role of the nursery teacher that need to be reassessed.

Possibly there is always a tendency to exaggerate the rate of real educational change, and in these circumstances possibly the question is too dramatic. On the other hand, it would perhaps be readily admitted that there may well need to be promoted significant changes of emphasis within the role of the nursery teacher. Here there appear to be two areas of special concern.

In the first place it would appear to the authors that in respect of the education of the pre-school child the nettle of 'cognitive' learning has to be grasped. The wording of the White Paper is, in fact, highly significant here: 'the value of nursery education in promoting the social development of young children has long been acknowledged. In addition we now know that, given sympathetic and skilled supervision, children may also make great educational progress before the age of five.'

## teachers and social workers

A second point—and this again relates to emphases within the education and in-service training of nursery teachers—is that care will obviously have to be taken to ensure that the traditional isolation of the teacher in her professional activity must not be allowed to become a feature of the life of the nursery teacher. Increasingly, it would seem to the authors, the task of the nursery teacher is to be seen as one which involves a complex co-operation with a wide range of agencies. This, it is clear, will require not only the possession of certain personal qualities, important as these may be, but also a broad sociological understanding.

If future demands on nursery teachers are to be complex, the demands on various 'support agencies' are likely to be no less testing. This is likely to be particularly the case in areas of social deprivation, where it is to be hoped that experience of earlier support under the Urban Aid Programme, feed-back from examples of 'positive discrimination' in certain Educational Priority Areas, and broader conclusions from the 'universality versus selectivity' debate in respect of social service provision generally are not ignored. The potential importance of health visitors in the work of recruitment and support is obvious; and if the idea of the educational visitor, which has been a characteristic of pilot schemes in London and South Yorkshire, is extended, this will also become an important part of his work. Health clinics, and possibly even mobile

library services, also have their part to play. And yet, as has been noted above, to get the children of the least-favoured social groups into nursery classes is only part of the battle.

How can a deeper and more permanent basis of parental support for pre-school educational provision be laid? Clearly this support needs to be of a positive kind: nursery classes must not be seen in retrospect as simply another chapter in the long saga of the gradual abdication of the parents' role, and the White Paper nowhere speaks more wisely than when it says that even for children in deprived areas 'provision for the under fives should build on, not supplant, parents' own efforts'.

This is, however, more easily said than done, and certainly no short-term solution is likely to be effective. Long-term strategies are called for, and, it might be assumed, need to be organised in the secondary school.

## secondary school links

Education for parenthood, although a relatively new concept, already has a number of facets. Common features include, however, the establishment of links between infant and secondary schools and—most significantly—a concentration on the language factor. One South Yorkshire school, for instance, has encouraged children in the school leaver category to write, illustrate and present stories for a local infant school. In North-East Derbyshire similar fourth formers have built up 'talking boxes', using the contents to stimulate conversations with infants. Simple word games and puzzles also appear in the programme. The aim in all this, it will be noted, is not only to give the school leaver, in an age when the period between leaving school and taking up the responsibilities of parenthood is becoming minimal, an insight into how children learn, but also to create some degree of confidence and deliberation in thinking and talking about the rearing of children. Here, in fact, are aspects of that process of long-term parental persuasion that are increasingly regarded as being of importance in the broader social strategies.

## play groups

One additional issue remains to be discussed. That is

the future of the play group. To at least some observers it would appear that this agency will be superseded by the nursery class; but is this completely the case? Little needs to be said of the importance of the play group, as a means of providing, as it were, an 'in-service training' for at least a minority of mothers. Nor is its importance as a means of educating the under-threes to be despised. Perhaps, too, it will remain important as a corrective to tendencies to over-formalise the education of the under-fives, providing a more neutral ground on which increasingly the professional worker can make a natural contact with the mother. Certainly the play group would appear to have a part to play in the background support which, as this short article argues, will be of vital importance if the widening provision of nursery education is to produce optimum impact on our society.

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## RESOURCE-BASED LEARNING

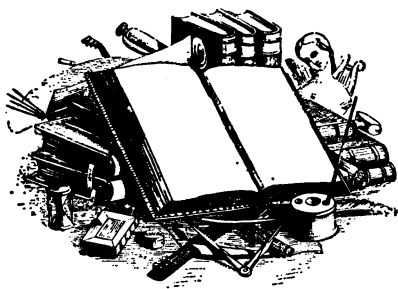
*Continued from page 7*

Printed and spoken words have been the schools' traditional resources. Technology has greatly improved the quality and extended the variety while also making pictorial and other non-verbal material and media readily available. This has made it possible to enrich, enliven and extend didactic material. But it does not of itself radically change teaching, though it demands more versatile techniques, because knowledge is seen as static subject-matter to be acquired by learning it.

Resource-based learning regards knowledge as dynamic and learning as a process: there is interaction as learning interprets and organises knowledge. This is not to say that instruction is out. Skills must be learnt that they may be used, and therein lies motivation. People and books are essential sources of human learning. So are other human artefacts and activities, and the physical world.

Because it draws on a wide range of human endeavour, resource-based learning should be widely accessible and intelligible. The teacher's task is so to organise both the resources and the children's learning as to make it so. Then schools may cease rejecting or alienating, and there may be an end to the polarisation of 'academic' and 'practical' curricula that subverts comprehensive education. *Ed.*

# Reviews



## a new role for psychology

**The Relevance of Education**, by Jerome S Bruner. George Allen and Unwin (1972), 175 pp, £2.50.

This book will already be well known to some *Forum* readers. But may I give it the strongest possible recommendation to any who have not come across it? It is essential reading for all those sympathetic to our general standpoint.

But it is not easy reading. Bruner has the art of taking his readers inside his thinking—and his thinking is concentrated and penetrating. Anyone who tackles this must be prepared to give Bruner his whole attention—at least to grasp the argument of each succeeding paper.

The book is 'built around' (Bruner's words) a series of essays written between 1964 and 1970, 'years of deep and tumultuous change' (p ix). They therefore reflect the development of Bruner's thought over this period; his growing concern with the deep social divisions in the United States and their implications for educators. Yet a consistent trend runs right through the collection—his recognition that education can be a powerful cultural influence; that educational experiences can be ordered and structured to enable people more fully to realise their humanity and bring about social

change—and so create a world according to their felt and recognised objectives. The last essay in the series, on 'Poverty and Childhood', stresses that the major problem humanity faces is not the general development of skill and intelligence but 'devising a society that can use it wisely' (p 158).

It seems to me that the main issues Bruner is concerned with are these: first, that man is *not* fatally conditioned by biological factors, as Jensen and Eysenck (the 'terrible twins') would have us believe. 'Man is not a naked ape' writes Bruner, 'but a culture-clothed human being, hopelessly ineffective without the prosthesis provided by culture' (p 131). The IQ 'is not a *process* but the product of many complex cognitive processes' (p 22). Second, Bruner holds that the psychologist's particular contribution is 'to convert skills and knowledge to forms and exercises that fit growing minds' (p 66); the pedagogical problem, he says again, is 'how to represent knowledge, how to sequence it, how to embody it in a form appropriate to young learners' (p 55). 'How one manages to time the steps in pedagogy to match unfolding capacities, how one manages to instruct without making the learner dependent, and how one manages to do both these while keeping alive zest for further learning—these,' writes Bruner, 'are very complicated questions that do not yield easy answers' (p 122). Yet it is from this analysis that Bruner, in his early essay (1964) entitled 'The Perfectibility of Intellect', states his view—that for any knowledge or 'empowering skill' in society there is a corresponding form that is within the grasp of a young learner at the stage of development 'where one finds him'—'that any subject can be taught to anybody at any age in some form that is both interesting and honest' (p 18).

In Bruner's view, it is the job of psychologists to identify these means,

and to provide this assistance to practising educators. One of these essays comprises Bruner's attempt to persuade American psychologists to concern themselves with this pressing problem—'I hoped to persuade them,' he writes, 'that developmental psychology without a theory of pedagogy was as empty an enterprise as a theory of pedagogy that ignored the nature of growth' (p xiv). In this country, few psychologists proper (ie in University psychology departments) concern themselves in any serious way with pedagogical questions—or with education (the situation is very different in the USSR). So Bruner's plea is as relevant here as in the United States.

Now that Bruner has moved from Harvard to the post of Professor of Psychology at Oxford University we may, perhaps, hope for a change. His penetration and grasp of related disciplines is unusual. He will bring to educational (or pedagogical) discussion a specific expertise, an understanding of the human predicament, and a sanity that can only be helpful at a time of sharpening controversy as to the nature of schooling, instruction and education.

BRIAN SIMON





## Trendy or prescriptive?

**The Free School**, by W Kenneth Richmond. Methuen (1973), pp 211, £1.40.

**Patterns of Community Education**, by Eric Midwinter. Ward Lock (1973), pp 95. £1.

The publisher's proposition is that any book on Free Schools at this time is useful (ie will sell). Mr Kenneth Richmond shifts his definition to 'de-schooling' adroitly and leaps on to and further impels the bandwagon. He begins thus: 'Talk of deschooling, free schooling—or should it be re-schooling?—is suddenly *à la mode*. Loose talk, mostly. It flourishes in unlikely places, nowhere more so than in the trendier colleges and universities. In each case, the underlying assumption in this sportive discourse is that it is not to be taken seriously.'

The first half of this book is an erudite argument exposing the festering body of the curriculum and school (it doesn't attack the teachers—after Dr Midwinter has compiled their tasks they won't mind either way). The argument draws extensively on the Holy Trinity (Riemer, Goodman and Illich) and assorted British guru (Jackson and Marsden, Musgrove and Blaug). The trendier academics are provided with a puffed out elaboration of those lists (known to the trade as Lister's Lists) of learnings which a school teaches: Schooling conditions everyone to the acceptance of schooling as necessary, Schooling is lacking in opportunities for worthwhile activities, Schooling distorts values. The latter part of the book consists of

a series of unrelated 'articles' looking at examples of 'unusual' State financed educational institutions: we get Folk-schools from Denmark; Parkway Philadelphia and John Adams High Oregon from the States; Countesthorpe, Wyndham School Egremont, the Open University! the Inter-University Biology Teaching Project!! and, at long last, Liverpool Free School from the UK. The half dozen pages devoted to Liverpool are dated, even second hand. No mention of John Ord or Bill Murphy, nor any appreciation of its social philosophy for giving power to the local community. Anyone wanting a book about the free school phenomena will have to wait.

Dr Midwinter's book is serious. It's likely to be regarded as an action handbook for headmasters and other face workers dealing with the threat of urban breakdown who see hope in community education. It cannot but be serious. Moreover it's on the rates. Consequently, Midwinter, whether he likes it or not, will be expected to have some answers. And inevitably, though with due trepidation, he proposes some after having drawn in the historical background in the first half of the book. He uses a model of four types of area: suburban, urban, rural and estate. To each area he applies twelve principles characteristic of community schools (for example: physical layout, staffing, management, curriculum, home and school relations, use of plant) and moves with a brisk analysis which ensures the vested interests of teachers and allied workers for the rest of the century. Schools are not what they used to be. It would be easy to be sceptical about the right, let alone the ability, of minor state functionaries to set about achieving the following objective taken from the twelfth principle of community education, School Ethos: 'The objective is to establish the school as an ideal microcosmic society for its catchment area; a model for all to

copy but one never removed from the community it is helping to improve. The school and the community need to form a rapport upon which may be built, in dialogue, the school which effectively serves that community. The school first ensures its anchorages within its social context and then it acts as a pacemaker; naturally enough, this operation is an extremely delicate one.'

The next phase in gentling the masses?

BERNARD BRYAN

*Leicester College of Education*

## comprehensive analysis

**The Comprehensive School: Guidelines for the Reorganisation of Secondary Education**, by Elizabeth Halsall. Pergamon, £4.50.

Following a brief historical review of the Comprehensive movement, Elizabeth Halsall considers a number of inter-related issues—the streaming/non-streaming controversy, the problem of the less able and the culturally disadvantaged children, counselling and curriculum. Additionally, and at some length (14 chapters), the problem of school size is discussed. Finally, there is a chapter on the relative advantages and disadvantages of different types of reorganised school.

This is a book for teachers, who will rarely have this kind of overview; or students about to begin a career in secondary education. An enormous number of questions are raised and in most cases are answered. Solutions and answers are based on examination of research findings from this country, America and Europe and mere theorising is avoided. Indeed,

the student teacher of the Comprehensive School will value this detailed analysis and carefully documented survey of the research findings for its very completeness and because it also provides a starting point and guidelines for more detailed examination of particular issues.

Refreshingly this is a practical book. Although it concentrates on the totality of school organisation it has much to say of value in relation to the classroom situation. For example, the concise outline of a method of individual marking found in the chapter on curriculum. With the larger issues there is no 'sitting on the fence'. A firm, clearly stated conclusion is reached in each case—based on all the available evidence. We are reminded that the common school has grown out of strong social and economic pressures. 'Once industrialisation takes place, once every man has the vote, once examination certificates become the initial passport to power, the education system can evolve, in the long term, only in the direction of greater communality.' 'Hence at classroom level, as much as at organisational level, the needs of the society are likely to affect teaching practice.' Only with the streaming/non-streaming issue does the evidence force a less positive conclusion. Evidence as to the intellectual effects of streaming and nonstreaming provides no proof either way, but the importance of the teacher's attitude and methods in either situation has now been demonstrated. That there are errors of allocation with streaming and that 'the social effects of nonstreaming are better than those of streaming, in relation to the accepted values of present-day society' are accepted. On balance there is an increasing move to unstreaming and it is important that each school works out a clear strategy for such reorganisation. Elizabeth Halsall gives a very sensitive exploration of the culturally deprived child,

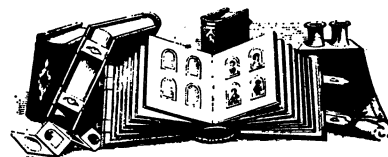
concentrating on motivation and the compensatory nature of good comprehensive education. So, too, does she examine the relationships of those concerned with careers guidance, pastoral care and counselling. This is a very sensitive area, especially in the larger school, and what is said will be reassuring because of its constructive balance. On curriculum the theme of motivation and wanting to learn is uppermost. The influence of the secondary modern schools is not forgotten in developing the 'inquiry' type approach and integration.

A major part of the book is concerned with the size of schools. A strong case 'is made to suggest that comprehensive schools do not have to be as large as previously thought. In essence, the smaller schools are easier to manage, have better school climates, are likely to be more innovative, other things being equal, and provide intrinsically better environments for effective pastoral care than is the case with larger schools'. It is recognised that 'larger schools provide a wider curricular choice and possibly slightly higher levels of attainment'. Considerable emphasis is laid on the effects on the people (children, students and teachers) who live and work in the schools and a whole host of factors—decentralisation, design of schools, movement, class size, other media of instruction—are examined in detail. Some might feel that the hope of solving some of the curricular restrictions of the smaller schools by introducing 'such devices as correspondence courses, educational television, programmed learning courses and, eventually, computerised learning' a fine ideal, but one in which cost is likely to put these schools well back in the queue with the bigger getting there first.

This is an important book, for its completeness, its exactitude and detail and its positive contributions to comprehensive reform. In my

experience through three comprehensive schools of differing size and type, all the issues raised are pertinent and the matter of this book should help to clarify them.

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## how without why

**Patterns of Language:** Explorations of the Teaching of English, by L Stratta, J Dixon, A Wilkinson. Heinemann (1973), pp 241. £3, paperback £1.25.

This is a strong book, firm about its knowledge, ideals and expertise, convincingly written (if over-wordy at times) and abundantly illustrated with examples. All the more regrettable that its context is deliberately narrow. Our discontents in education at all levels centre on the lack of coherent experience and we need help in making relevant connections, in re-establishing total meaning. Salvation through English teaching is no longer enough.

Nevertheless, this is one of the true scriptures. Not only are earlier prophets mentioned (Leavis and Thompson, Holbrook, Walsh), but the authors focus in the first two chapters on writing (after talk) and literature as 'the central part of English in the classroom and the best of the

tradition in English teaching'. These traditional areas are closely re-examined in the light of our increased knowledge of how people learn and grow. New teaching methods are looked at carefully and their vices exposed. In the chapter on 'Extended Projects and Thematic Work' the need for clear structures is set out, related to the complex business of choosing a suitable theme and to the art of allowing spontaneous discovery within supportive limits. Here, as elsewhere, the authors show their concern to ensure that the learner is encouraged to take greater responsibility for his own learning, but always in the context of the teacher's sensitive and knowledgeable support.

Although much is expected of the teacher, the book is full of evidence that he can be trusted to fulfil a complex role as facilitator or enabler. Its exhaustive content is presented not as explained theory but in the examination of 'live' material from classrooms or teachers' workshops. In this way the book enacts its own doctrine since there is a built-in belief in the need for considerable expansion of In-Service training in line with Cycle Three of the James Report proposals. Furthermore, the need of the teacher to work in a supportive climate is the burden of a final chapter on 'The English Department'.

New doctrine centres on 'Language and Experience', a chapter which will not be news to those familiar with Andrew Wilkinson's **Foundations of Language**. Here the analyses of written passages sound strangely like examples of the 'old' textual criticism; it is the subtle examinations of two interviews that have a totally new slant. If a revolution is in progress, it is a slow one; but it will be greatly aided by the splendidly conceived outline of an Educational Linguistic course which closes the chapter. May this be used wherever teachers are trained!

Why, after all this richness, does one have to voice reservations? What is missing is a feeling of personal context and personal meaning. We need to make sense of our lives as teachers and learners, alongside other teachers and learners: subject specialism is our medium. To the question posed early in the book, 'Why are you teaching English?' we have an answer, not in personal terms, but in terms of Explorations of the Teaching of English; the question 'why' is answered, despite all the sensitivity and sympathy, merely in terms of 'how'. Only in the context of newly conceived and clear reasons for having schools, and for having syllabuses, and for having to make compromises, can good books like this one be valuable.

PAT RADLEY

*Leicester College of Education*

## new insights for special education

**Towards an Educational Theory for the Mentally Handicapped**, by J McMaster. Edward Arnold (1973). pp 134, £2.

Written by a University Lecturer who was formerly Senior Tutor in Charge of Courses for Teachers of the Mentally Handicapped in a Preston College, the main theme of this book is concerned with demonstrating how educational theory should affect practice and, as such, lead to a realistic appraisal of 'what education for the mentally handicapped is all about'. Although much has been written about the mentally handicapped and their education in recent years, this area is still fragmented, unstructured and largely chaotic.

This book is a notable, even unique, addition to the literature in that the

dynamic concept of educational theory that is presented provides a systematic and professionally articulate method of viewing the educational process as it should be applied to these children. Of particular significance, however, is the insight and evident knowledge gained through experience displayed by the author in his discussion. As he himself states, 'It is not enough to have good intentions and the right sentiments'; throughout the text there is an awareness of the many problems inherent in this 'new' field of special education. Many controversial topics are raised and fully discussed (eg teacher training and 'after school'), and at no stage is a particular issue avoided or dismissed with some facile turn of phrase.

Initially, the concept of mental handicap is examined in detail and the danger of 'convenient classification' highlighted. A model of educational theory is developed and subsequent analysis of each 'discipline' is given. The contribution of experience, history, psychology, philosophy, sociology, medicine, political, economic and social studies are all considered and each element is firmly related to practice within the educational area of mental handicap. The author achieves success in his attempts to identify and evaluate these various contributions and to unify them into coherent theory. The concluding chapter rightly stresses the need for systematic planning in the education of the mentally handicapped and the vital importance to teachers of distinguishing between an aim and an objective is well demonstrated.

The book achieves a readable balance between theory and practice and offers a synthesis of the present position which should prove invaluable to all who are engaged in helping the mentally handicapped child, whether at initial or in-service training level.

DAVID N THOMAS

*Leicester College of Education*

## A FORUM BOOK

on the teaching of unstreamed classes at primary and secondary level,  
written by practising teachers

(Edited by Maureen Hardy)

# AT CLASSROOM LEVEL

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