

# FORUM FOR THE DISCUSSION OF NEW TRENDS IN EDUCATION

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# Theory and Innovation

The past decade and a half has been unprecedented for educational innovation. As a forum for the discussion of new trends in education, this journal has often focused on particular issues which raise theoretical as well as practical problems. The comprehensive secondary school, and nonstreaming within it and at the primary stage, are not merely methods of organising education to mitigate social divisiveness and self-fulfilling prophecies of failure for many; they are means to teaching and learning which accord with current knowledge about intellectual growth and extend the possibilities for individual choice.

Research into children's learning has provided the rationale for various innovations in teaching methods and moves towards curriculum reform, but this may not always be explicit at the classroom level. A comprehensive intake of itself poses organisational and curriculum problems which cannot be resolved from the standpoint of bi-partite thinking. A teacher embarking on teaching a nonstreamed class, at primary or secondary level, finds himself forced to reappraise formerly accepted curricula and to seek new teaching methods to meet an immediate situation.

If full value is to be gained from these changes, it is important to be aware of all the elements in the situation and not to operate only at the empirical level. In general, the teacher's role is changing from teaching at a class to structuring learning situations for children. If this is done in an *ad hoc* way, the underlying rationale or theory may get lost to sight in the working out of day to day procedures. This is the problem that is examined in three articles in this number.

Professor David Hawkins of the University of Colorado has spent a year in this country studying the work of British primary schools, with which he was already familiar. His article analyses and discusses the rationale which he has found 'largely implicit' in our primary education, and so stimulates the necessary 'fresh theoretical thought'. The discussion is taken into the secondary field by Douglas Holly who examines the theory and practice of self-directed learning, and by Dick West who

looks more specifically at some of the implications of Nuffield science. Questions relating to the same theme are considered by several contributors to the Discussion pages and in some of the reviews.

The Thomas Bennett School at Crawley is well known for its success as a comprehensive as well as for its innovations. Particularly relevant, therefore, is Pat Daunt's account of the long and careful preparation he devised before introducing various changes, so that all the participants might consider the whys and hows beforehand.

Clarification of the theoretical basis of much current innovation is an urgent priority if this is to proceed in a coherent and effective way. That there must be innovation, in an age of scientific and technological revolution, most thinking people are agreed. But if interest in new methods is expressed in terms of a confused sentimentality this only provides an opportunity for people, such as the authors and followers-on of the Black Paper, to start a campaign to discredit all educational change without themselves proclaiming any rationale.

We shall be glad to receive further contributions to the discussion here opened up, particularly in terms of what teachers find confusing about the variety of innovation now in train, or whether their experience suggests that some projects have not been sufficiently well thought out. It is on the teachers that the success of the present innovation in education depends, and it is for them to contribute to it by criticising the theorists where necessary from the basis of experience in the school situation. An effective dialogue, difficult though it may be, has never been so urgently needed as in this period of innovation.

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## Business Information

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# Square Two, Square Three

## David Hawkins

Professor Hawkins, who has published and taught in philosophy, has been Director of the Elementary Science Advisory Center at the University of Colorado since 1965. He has just spent a year here observing British primary schools.

After a year's visit to Britain, dividing the time between Colleges of Education, teachers' courses and primary classrooms, my wife and I have far more impressions than we can easily sort. We brought, for the sorting, the experience of long-time nursery and primary teachers plus our recent joint experience in the realm of primary science and mathematics. Some of that experience has been enriched by previous British associations, and we share with you a long (though minority) tradition—for shorthand that of Froebel and Dewey. One result of preliminary sorting has been a need to redefine and sharpen ideas, to find ways of talking and thinking that do justice to real achievements that have been made here, without dulling the edge of internal criticism.

Some developments in British primary education do represent, we think, a major practical achievement, one of potential value for the whole world. The theoretical rationale for this achievement, and its accrued implications for extending theory or modifying it, remains largely implicit. Those involved have been too busy with the main task to commit much energy to the discipline of educational theory. They display what Michael Armstrong recently referred to, in these pages, as 'our characteristic fondness for piecemeal social engineering'. Since fundamental progress is never simply engineered—it comes by evolution, not mere design—I think the situation is better than his words make it sound. I'd rather say there is now *enough* experience, guided by older theoretical formulations but not limited by them, to make fresh efforts of theory both necessary and rewarding.

From this point of view one may regret, with Brian Simon, that so otherwise impressive a document as the Plowden Report broke little fresh ground. Better theory should follow from better schools, and the reverse. Many infant schools, having arrived at Square Two, are now confronted with problems they have not solved, but which conventional schools of the past could hardly see or could easily sweep under the rug. Fresh theoretical thought is necessary. Second, because attempts to extrapolate successful patterns of teaching

and learning from Infant to Junior (and beyond), while encouraging and often impressive, raise questions which at best find partial answers within the framework of older theory. And third, fresh thought is necessary because without it we speak mainly to the converted while a gathering Opposition, untroubled by acquaintance with the progress that has in fact been made, tends to convict us from a point of view we have not adequately challenged, of sloppy thinking about freedom, spontaneity, expression, creativity.

This third reason for theoretical work ought to be subordinate to the first two, as extrinsic to intrinsic. I am sensitive about it, however, because in the United States we lack the practical demonstration of success—real however limited—which Britain can display. Our contributions in the past were largely from the greenhouse, not the field. The movement which has been brought to some success here died with us aborning. In the US the old slogans of 'progressive education' became a debased coinage before widespread success could give them solid meaning. So for us today fresh theoretical arguments are especially important. I offer here some of my own thinking, stated in brief and therefore dogmatic form.

## Culture and choice

A central theoretical assertion, basic to all the others, is that of the rich and indissoluble connection between two human attributes. One is the human 'aptness for culture', the necessary transmission of culture from one generation to the next; the other is the human causality of self-direction and of choice. The first of these attributes entails the consequence that education is not simply a kind of unaided learning or spontaneous mapping of the world about, and neither is it merely the spontaneous expression of some inner development. It is also an assimilation of tradition. The second attribute entails the consequence that culture is not simply 'transmitted', but is assimilated

*selectively* in accordance with the dictates of a constructive process in which, as sentient and self-organising creatures, children cannot help being engaged. This *active* assimilation of culture is also, in the end, the major source of cultural evolution.

Insistence upon the second of these attributes is sufficient to dispel the criticism that in giving children a wide range of significant choice in the early years, and in giving less time to closely guided exercise and drill, we are thereby denying them the cultural birth-right of rigour, discipline and skill without which they cannot later function competently as inquirers or self-governing agents. Every responsible thinker since Aristotle has recognised that the development of skill or competence takes place primarily through the *exercise* of it. At no time since birth does a child lack some competence and knowledge which he can bring to bear in extending his experience and organising it. Learning is the use of knowledge to extend it, and growth in the capacity to learn presupposes learning. Discipline and organisation come because they are essential to certain phases of learning—but only as they are understood and prized for the gain they bring. The notion is indefensible on any theoretical grounds that self-directed inquiry can be suspended for *n* years until a child has been ‘properly equipped’ for it by other-directed routines of ‘teaching’ and then, somehow, switched on. Some children survive and even profit from regimes so constructed, to be sure, but that is evidence for the virtues of suspended animation only on the assumption that the animate component, suppressed or ignored, is in fact missing. For some happy few, privileged by outside background or circumstance independent of school, even the dreariest and most mechanical of school routines can be a source of some learning. Statistical patterns of success and failure in such schools strongly support this explanation. The ability of ‘able’ children derives mainly from the resources of education and motivation they bring with them from a world that is, and is left, mysteriously ‘outside’ the narrow formal school. So it is that ‘ability’ becomes a catch-all explanation of success and failure, rather than being seen mainly as a dependent variable, a diagnostic key to *our* successes and failures as parents and teachers.

On the other hand we must also and equally recognise that the provision of wide and significant choice for children’s learning is very far from the spirit of *laissez-faire*, with which critics often identify it. The materials provided in a good primary school are calcu-

lated to engross children and lead them to wider experience, and to a richer information-match with the resources of our culture. The critical question is not whether, but how, this match should be achieved.

## False stereotypes

In this connection it is important to emphasise that the polar opposition between ‘authoritarian’ and ‘permissive’ teachers or classrooms is a theoretical misconstruction. It reduces the many dimensions of description to one. Most people engaged in theoretical chat are happy to say that the best classrooms are ‘somewhere in-between’—and they are happy to say it because, like stout opposition to sin, it conveys no information.

The permissive or *laissez-faire* stereotype implies that all choices are made by children in an environment that is somehow given. The authoritarian stereotype implies that all choices are made by the teacher, somehow guiding the little hands, eyes and minds. The image of being somewhere in-between implies a linear mixture. The teacher gives some choices to children, giving these up but keeping others for himself, like a dealer in poker. But the choices which are of the essence in learning are choices no one else *can* make for a child, and the choices which are essential in teaching are choices a teacher cannot be rid of except by default.

Thus any classroom has to be described in at least a fully two-dimensional way and cannot be mapped on to the authoritarian-permissive axis without losing the essence. Teachers’ choices may diminish the range of children’s choices, or the value accruing from them. Teachers’ choices may likewise enhance the value and range of children’s choices, and the art of doing so becomes one part of what it means to be a teacher. In some contexts this art may lead the teacher to a quite formal role, in others to overt withdrawal. The switching from one role or phase to another is missed by the conventional stereotypes. Some able teachers are so successful in creating and maintaining children’s self-directed work that they appear to be operating on *laissez-faire* principles, and may themselves fail to realise the vital role their observation and guidance is playing. Other very ‘formal’ teachers (whom some of us are fortunate to remember) do yet manage to give their children the essential autonomy.

How then should we describe the relevant interactions? Clearly these are of many kinds, but it is a job for theory to schematise them. Initial provisioning of materials and organisation of space must be made before one knows the children immediately concerned. Reception of new children into groups already functioning may ease the problems, but does not remove them. A key principle in such design is to provide for a wide range of initial choice, thus maximising the probability of early involvement for a predictable diversity of young humans—diverse in ways of responding to a new environment, and diverse in earlier-acquired interests and talents. Here the major concern is that of providing an environment in which children can show us who and where they are. The rate at which a teacher can acquire information about children is proportional to the relevant variety of choices open to them, and is minimal when they are all put mechanically to the same tasks; with forty children no teacher can be uniformly successful, but expediency does not diminish the need to try.

## Responsive teachers

The uses of such diagnostic information are manifold, but one use is crucial. By efforts to read behaviour the teacher can begin to modify the initial provisioning for a class, encouraging early manifestations of interest and competence. Some traps catch no one, and are temporarily put away. Others do draw early participation, and need expansion and enrichment. But even this is not the main thing. As children sort themselves out early, a teacher can begin to see them as individuals. As he begins to respond to children selectively in the light of this early information, *he* thus moves into *their* ken as an individual, a person who acknowledges them and is not just a formality. Some children will help identify themselves early, others will seek invisibility and maintain it with skill—especially, again, among forty. The interchange and spontaneous groupings among children enter here too as part of what a teacher reckons with, or tries to—though with such numbers the possible groupings are beyond reckoning.

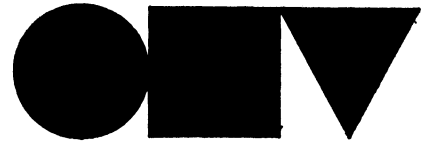
At this stage already we must be prepared to question the convenient assumption that *all* of children's 'needs' are somehow made manifest through their choices. This question is raised by Irene Farmer in the *May Forum*, and it is a critical one. Children can have

needs which are, of course, beyond their own powers of recognition, yet may show these to us in their behaviour, through their choices and ways of choosing, their ways of engaging and avoiding. But the concept of 'need' is a subtle one, and when the subtleties are lost it can be a too convenient catch-all. Sometimes it is used to imply that children's growth and learning is, or should be, dictated solely by such conscious or unconscious expression of need—it being the only task of a teacher to interpret needs and help children provide for them. Such an interpretation by-passes the implications of our first principle, of the human aptness for culture, and in the process distorts the second—that of human selectivity and autonomy—into a metaphysic of unfolding from within, of self expression. This same criticism was the ground of Dewey's objection to many US Progressive Schools, their apparent obliviousness to the social and shared character of that which gains valuable human expression, and its dependence upon prior acceptance and assimilation of the order of the world about us. The diagnosis of needs is necessary but not sufficient. Beyond this lies the teacher's still-open choice of means to help the child. For this choice there are other requirements to satisfy—to get on and into the materials of a curriculum, to match a child's resources, and to help him evolve and reveal yet further needs, *new* needs. In the long run needs themselves are the product of learning and not merely a kind of indwelling free energy it can tap.

It is the social and shared character of experience which we must again emphasise in confronting another knotty issue, the debate over integration, subject-barriers and subject-discipline.

## Integrated Day

The major contribution of the pattern of the Integrated Day, it would seem, is that it facilitates a simultaneous diversity of activities within a classroom and thus at any given time a wider range of choice for children than is otherwise available. This is, of course, a pattern of long standing in the Kindergarten and Infant tradition—what is new is its growing influence beyond the first Junior year or two. A secondary consequence is that this pattern excludes—for all except special periods—the teacher who is 'instructing' a whole class. The integrated day does *not* entail subject



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matter integration, though it may allow it. I suspect there are classrooms in which a science corner and a maths table never meet, even though children move freely between them !

In its implied exclusion of didactic teaching the pattern of the integrated day also allows for the abolition of streaming. But again, there is no magic in such a formula. Sometimes the Integrated Day (and its extension in the Open Plan) may indeed allow a kind of internal streaming, based benignly on the slogan that every child is allowed to go at his own rate. To assume that a child – any child – has an inevitable rate, fast or slow, is an unwarranted extrapolation from routine experience. Such varied things as the tensions of family background, chronic infection, undetected imperfections of sight or hearing, diet, genetic syndromes of wide variety, may indeed grossly limit a child's energies for learning. And variation in the normal

range, constitutional or acquired, will surely be reflected on any *single* track as a wide variance in learning rates. But where children are going on different tracks, which they have helped a teacher devise for them, quantitative comparison of *rate* is not logically possible. This does not, again, mean *laissez-faire*. A child who does not begin to read or write when others do may come to the written word by his own special pathway, from trees or fossils or from racing-forms, and it is part of a teacher's job to scale up the probability of every such entrapment suggested by his behaviour. That is a kind of integration, and it comes through being a teacher, not only a classroom manager.

## Lively classroom not enough

Even the latter role is a difficult one, and one cannot easily blame a teacher of forty in a crowded school, who fails mostly to go beyond it. The humane and lively classroom is a British achievement on a larger scale than elsewhere, and a necessary condition to further progress. But it should not be defended for more than its very real contribution. In it children may help themselves and each other to learn more readily than in the past; but this is no substitute for the adult feed-back loop, or for the authority of a teacher who can meet an individual child on his own ground and invest it for him with the promise of growth.

The matter of subject discipline is another topic very poorly placed in the framework of older progressive ideas. Here indeed the joint relevance of our two principles cannot be forgotten, though providing no magic formula. But critics of the opposition rush in here, and we cannot afford a pose of angelic diffidence. Here the autonomy of the learner is confronted with the relative autonomy of the several 'forms of knowledge' – more properly of the diverse ways in which we organise experience and extend it. A major aim of childhood education is to lay such groundwork as will offer, through planning of environment and the strategy of teaching, the maximum informational match with evolved conceptual structures in the sciences, with the ways of the arts, with the logical schemata of historians and mathematicians. The stereotype of the free and permissive infant or junior environment clashes with that of didactically organised presentation in history or in science, of drill in mathematics or foreign language or music.

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## 'Stages' are misleading

A compact of compromise between primary and secondary schools is far too obvious a makeshift to take seriously. This compromise is a bit too easily suggested, I think, by older and current theories of developmental stages. For even infants are abstracters, schematisers, nascent theorists; and adults are still 'concrete-operational' in much of their learning, especially in their more creative phases. The developmental structure of the mind is more multiple-tracked and varied than a model of stages will allow. Useful as it may be for some phases of psychological investigation, this descriptive model may too easily turn prescriptive and cause us to neglect the interpenetrations of 'stages' just where we ought to be seeking them out. Here indeed we are at a frontier, not simply a point of controversy between rival schools of thought. But there are a few boundaries.

One is, I think, that although excessively permissive primary schools may fail, for many children, to reach levels of competence they could and should be brought to, it is not true even of these schools that they do substantially worse than the narrow formal schools they replace. In both kinds of schools many potentialities go undiscovered. At best the gains are conspicuous, at worst the situation is not worse than before: but that is not high praise. A gain not measured in this way lies in the heightened morale of teachers and their greater openness to investigation within the style of their craft—to professional growth.

## Too many assumptions

Another boundary, I think, is a growing awareness of *where* the work is needed. Many of us working in the curriculum field, with teachers and children on one side and with our beloved 'disciplines' on the other, have begun to see how poor the match is, in essential ways, between the equipment most children bring with

them and that presupposed by most of our formal pedagogical traditions. The elementary abstractions—of discreteness and form in mathematics, of time and relation in history, of organisation in the arts—are taken for granted in those traditions by adults who have lost the pathways of their own learning, and who operate on a surface verbal level to convey intellectual structures which the words themselves already presuppose.

To probe with these sorts of foundation questions in mind, with teachers and children and not above them, is to begin to discover the rich array of links there can be between the child of now and the culture he may inherit and recast. In this we all have much to learn, including us academics who often so poorly grasp the foundations of our own stock-in-trade.

## Economics and values

A third boundary, to which I have already alluded, has to do with numbers and, inevitably, with budgets. One consequence to which the progress of primary education has brought us, I believe, is that the problems facing us—those of consolidating the gains at Square 2, and of extending what teachers can do to tackle the deeper problems at Square 3—is that we need smaller classes, more in-service investigations and teaching, more widespread social acknowledgment that the education of the young is and ought to be skill-intensive, devoted—and costly. Money is not sufficient—we do less well with a bit more money in the US. But at times money becomes a limiting factor. The problems which Britain at this moment is supremely qualified to tackle are, I think, so limited. In addition to the other good and useful projects going on here, I as an outside well-wisher would pray for some Schools Council Project on how to persuade the public and the government that it would be a rewarding adventure, in straitened times, to give teachers *more* moral and material support—and *smaller* classes. At home some of us work for those things too, but in important areas we defer to your leadership.

# Teaching for self-direction

**Douglas Holly**

Mr Holly taught for several years in secondary modern and comprehensive schools and lectured at a college of education. He is now at Leicester University School of Education as tutor to a Method Group for postgraduate training in interdisciplinary Humanities and Social Science in secondary schools.

In my previous article (Self-Directed Learning in the Comprehensive School, *Forum* Vol 11 no 2) I argued that for the range of pupils who make up the bulk of our secondary population—including most of those at present in grammar schools—aptitude and enthusiasm for self-directed learning techniques cannot simply be *assumed*. Both affective and cognitive skills required in a self-operating, problem-solving approach have to be learned. My argument, based on the researches of both linguistic sociologists and social-psychologists studying child-rearing, is that only a relatively few of the pupils in our state schools have problem-solving behaviours and relevant language skills as part of their familial socialisation, so that only a few have an in-built motivation for this when they come to school. Young children, of course, are full of curiosity, but it is a curiosity that is often very fleeting. Good primary teachers know that sustained interest and involvement is something that has to be worked at. Although more youngsters are now arriving at secondary schools able to bury themselves for extended periods in some project and keen to work things out for themselves, where this is the case it is usually the result of devoted work by a succession of infant and junior teachers with a full awareness of the *rigour* involved in good topic work—both on the part of the teacher and the pupil. Teachers involved in self-directed work in the first years of secondary school report that, even in ‘progressive’ areas, such skills and motivation are patchy—indicating just how difficult is the task involved for primary schools.

It cannot be assumed, either, that secondary teachers can be content to rest on the achievements of their primary colleagues even where these have been of a high order. Secondary age pupils ought to be approaching a level of development where attention to the relations between *ideas* can be sustained—as opposed to the earlier stage involving mainly ‘concrete’ thinking pertaining to physically present examples. Presumably secondary work expects more and more to extend pupils’ *conceptual* thinking—in however rudimentary

a form. Thus the various Nuffield and Schools’ Council projects are experimenting with materials designed to develop in pupils the beginnings of concepts derived from disciplines ranging from anthropology to zoology.

Now not even the most ardent heurist will argue that young people are going to ‘discover’ such concepts simply by handling material—however skilfully selected by the teacher. In fact the heuristic/didactic debate is one of those non-arguments which occasionally afflict education. A little reflection should convince anyone that what the teacher does is usually didactic and what the pupil does is heuristic—in however primitive a way. When someone first solves a quadratic equation he is doing something that men have done for centuries—but it’s never been done by *him* before. Nor will he ever ‘learn’ to do it unless he does it for himself, however well or badly the teacher has explained the process. On the other hand unless the teacher or the text-book writer *has* explained the process it is extremely unlikely that he will learn. Both didactic (‘teaching’) and heuristic (‘discovery’) elements are involved in learning almost anything beyond nonsense syllables.

What we are about, then, in the self-directive approach is transferring the didactic element to what Bruner terms the ‘structure’ of the learning situation—ie building into the self-operated materials a logic of selection and an explicit set of directions for the pupil. If the directions are expressed as ‘suggestions’ this is no more than a matter of etiquette—they are still directions. If the material is presented to schools by outside projects as ‘unstructured’ this simply means that the *teacher* is being asked to supply any structure over and above that intrinsic to the selection.

Wherein then lies the ‘self’ element in self-direction? How is this different from the sort of prescriptive exposition found in conventional methods of teaching quadratic equations? The answer I think is inherent in the *goals* implied in the various forms of self-operative approaches enumerated in the last article. These goals are in the direction of developing constellations

of behaviours which can be termed, respectively, 'autonomy', 'critical awareness' and 'collective action'. Whereas learning the mechanical processes necessary to solving a quadratic equation does not, of itself, involve the formation of concepts, learning these generalised behaviours certainly does. To achieve autonomy, for instance, one presumably needs a fairly sophisticated understanding of competing alternatives on which to base one's autonomous decisions. 'Autonomy' in this sense is both a process and a goal. One can only 'learn' autonomy by making decisions for oneself—informed decisions based on conceptual awareness. Self-directed learning is about precisely this—about the formation of concepts leading to a genuine degree of self-sufficiency.

It is also, I feel, about learning how to look outside and beyond a given set of prescriptions, an education out of what Marcuse calls the 'one-dimensional' thinking which accepts a certain way of looking at things because it is in favour in a given society. In schools we have tended to adopt the attitude that ideas must be taken on trust because respected adults—the teachers—propound them. It is this, as well as the lack of opportunity for cognitive development, which lies at the back of objections to the heavy reliance heretofore on exposition. Pupils must think things out for themselves not only because this is the only sure way to higher intellectual skills but because they must learn to test out ideas against developing *personal* experience (direct or indirect)—the goal of 'critical awareness' mentioned above.

Self-operated learning is also often a *group* process, involving co-operation between individuals in the process of an enquiry. Very little is known about the mechanics of this. Frank Worthington's article (*Forum* Vol 11 no 3, 'The observational study of classroom groups') raises some interesting possibilities. Much clearly depends on the 'structure' provided, much on the personnel involved, much on the social structure of the group (whether mixed or single-sex, for instance). Much also depends on the nature of the task and whether it is likely to bring out consensus or conflict within the group. In either case something is learned about *collective action* in the process, so that here we have another 'process objective'. Conventional learning situations, by contrast, involve only competitive emulation—a very one-dimensional activity in that it presents no genuine alternatives for action.

There is an obvious need for empirical enquiry in all these areas if self-directed work is to succeed in its

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implied aims. We need, as a base-line, to know more precisely the nature of pupil response and reaction to 'trad' lessons. For instance, how do streamed classes differ one from another in response to similar pedagogical input? How do group reaction phenomena operate in conventional teaching/learning situations which emphasise group stereotypes?

We also need to have a clearer typology of self-operative learning situations. These may range from some Nuffield work within a streamed subject division, through project work in a nonstreamed class situation to a random collection—or even individuals—working on an enquiry basis outside a classroom situation of any kind. While all the considerations mentioned above will be involved in varying degrees in these different circumstances they will presumably bear differently upon each.

Practising teachers will want to know *how* to bring about a growth in enthusiasm and aptitude for self-direction. What are these 'intervention techniques' that are called for? The Americans are currently working on a variety of 'intervention' programmes involving—typically in spite of Dewey—a large element of expository teaching. This is seen as inevitable in view of the magnitude of the problems of their underprivileged minorities. For the reasons suggested in this article it is unlikely that self-sufficiency can be achieved in this way. And I firmly believe that the problems of the underprivileged cannot be solved in the end without the self-sufficiency of the underprivileged themselves—by which time, of course, they will be well on the way to emancipation. It seems evident that such 'intervention techniques' as are intended to produce self-direction will be ones that *exercise* it. For it is important to recognise that no one is entirely without the nascent forms of self-direction. What is required is pedagogical techniques designed, as far as possible, to suit the needs of each individual pupil. Insofar as the characteristics involved are probably socially-related this task need not be as enormous as it sounds, for most pupils in a given school will usually represent a band of the 'self-directive spectrum'. Thus individual assignments within a general curriculum project ought to be possible. These will need to be so structured as to develop the pupil's rudimentary cognitive and lin-

guistic skills as rapidly as may be to the stage where he is enabled to take over more and more of the effective direction of his work. I suggest that *success* is a great source of affective attachment so that the more a pupil is able to achieve in these terms the more committed—motivated—he will become to the approach. At present many pupils clearly designated 'less able' vehemently reject any element of self-direction. This reflects their alienation from meaningful school work, and thus their willingness to undertake only the more ritualistic classroom activities such as mechanical exercises. It also reflects their acceptance of their imputed capacity in that they probably genuinely doubt their ability to work without close supervision. If some of the energy previously expended on the objective assessment of 'aptitudes' and 'attainments' in terms of specific content or generalised 'intelligence' could now be turned to devising tests of self-direction, this would obviously be extremely useful—provided no one treated these too as deterministic 'explanations' rather than suggestive *descriptions*. In the meantime secondary teachers will need to assess their pupils' stages of self-direction as accurately as possible on a fairly subjective basis—in consultation where possible with primary teachers. Having done this they will need to devise work for each youngster which is capable of stretching his or her present capacity and leading, through an experience of reasonably hard-won success, to the next stage.

Finally, implied throughout my argument, is the assumption that 'self-direction' or 'autonomy' is an educational aim taking precedence over the more limited goals usual in our formal education system. This is not because of any lack of respect for the 'disciplines of knowledge'. Self-direction and autonomy are meaningless *except* in a context of some form of knowledge and understanding—one must always ask 'self-direction in *what?*', 'autonomy in terms of *what?*' But demonstrably many, perhaps most, of the other-directed young people in our conventional schools today are impoverished in terms of knowledge and understanding—precisely, I believe, *because* they are not personally responsible for their learning. This is a very persuasive argument for the rapid but intelligent development of these approaches.

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# Reflections on curriculum reform

**Dick West**

Mr West is head of the Science Department at Walworth Comprehensive School and Chief Examiner in Environmental Science for CSE in the Metropolitan region.

Recent changes in both the methodology and content of science education have been brought about by a variety of pressures on, and from within, the schools and universities. The chain of events has been complex but is well documented. An accidental by-product of recent change however is the possibility, and I put it no higher than that, that teachers may be in the position to investigate more fully the implications of the language we use with the children we teach. Of greater importance we, the teachers, are becoming more aware of the language the pupils use and how the development of that language does not of necessity, nor of right, register with the development of the subject we teach. In this short article I will attempt to indicate some of the implications of curriculum reform in terms of language and the learner. Initially I will concentrate on the immediate effects of the Nuffield Chemistry proposals but attempt finally to generalise into the area of the curriculum at large.

It is important to appreciate that the child learning science in school faces a number of *concurrent* and *related* problems which have by tradition been regarded as both separate and unrelated. He has to come to terms with

- (a) the **vocabulary** of the subject;
- (b) the **content** of the subject;
- (c) the **methodology** of the subject;
- (d) the **language** of the subject.

Our traditional teaching programmes have, by and large, concentrated on vocabulary and content, and at times both teachers and taught have functioned at the level of labellers and cataloguers. Recent reforms such as the Nuffield Chemistry proposals have directed our attention to the methodology of science and our pupils are encouraged to investigate and solve problems, with syllabus content becoming to a degree both open-ended and reduced in quantity. The language of science, and particularly its relationship to the language of the child, has however received little attention as an examination of the Nuffield 'Introduction and Guide' will show.<sup>1</sup> The irony of the present situation is that reforms that of themselves take no note of the prob-

lems of language do by their very nature provide the means of solution. What is disturbing is that unless attention can be focused on the problem, and the potential for solution, it is possible that damage may be caused to the children we are teaching.

Four aspects of the Nuffield proposals provide a framework for an attack on the problem of the language of science. These are

- (a) the nature of the **approach** to science;
- (b) the nature of the **experiences** structured for, and with, the children;
- (c) the emphasis on **group work** in the laboratory;
- (d) the attitude to pupils **written work**.

I will indicate briefly how changes and reforms in each of these areas can be utilised more effectively than at present.

We know a great deal about the probable way by which children learn concepts and we are very much aware that science is highly conceptual. We do know that children at an early age use words without knowing their meaning, and that we as teachers use words without checking that they have meaning, or the same meaning, to the children we teach. We find by analysis of the approach to science teaching today that science is regarded as a system of inquiry and not a body of knowledge, and therefore the vocabulary we build up is in support of a method of approach to problems and not an end in itself. The opportunity exists in this approach for the development of a meaningful vocabulary and language pattern, as the naming of terms gives way to the description of active procedures and the application of established techniques. It is however salutary to note that whilst it has been suggested that the apparent 'closed' nature of traditional science teaching served to deter the inquiring and creative mind, it can also be argued that most of our children conditioned to expect instant success by streaming and selection, together with the methods by which many other subjects are still taught and examined, are going to react even more violently against the open-ended, inquiry approach to science. The removal of the prop of 'facts' and predigested examination answers is

proving an unnerving experience for many children and it is vital to seek an explanation of why this is so.

I think it is important to appreciate that concepts are built out of a range of experiences and particularly through the process of classifying experiences. Modern science teaching with its emphasis on providing children with concrete, practical experiences would seem ideally placed to develop concepts effectively. The very failure of pupils to internalise their experiences, as manifest by their uncertainty, concern and often explicit failure to master the language of the subject, points to a weakness in methodology. Bruner<sup>2</sup> has pointed out that classifying categories do not exist in nature but are invented by man and I suspect the problem lies here. We provide experience but we do not structure that experience with a view to the pupil learning the language of the subject. The structure that exists is directed either explicitly or implicitly at the content and methodology of the subject. Any failure we meet is promptly put down to poor English, poor reading ability, poor general ability, or an unsatisfactory home background. These factors may well contribute to failure, but does our method of teaching in itself contribute to potential success?

A further area in which the change in methodology provides opportunity for solving our problem is the emphasis placed on group work and group discussion. Children learn a great deal by talking to each other for they find themselves in the roles of both talker and listener. We, as teachers, have always made use of the listening capacity of children but here at the very heart of our new teaching method is the long awaited chance to let children talk, and for them to learn by doing so. The very process of verbalising appears to aid learning as those of us that talk to ourselves when attempting to solve problems know. I think it is essential that we make greater use of this potential for constructive and demanding talk that now exists within the group organisation of our lessons. The tendency towards mixed ability grouping in many schools may well aid both the able and less able pupils in this area: the able will learn more effectively as a result of explaining points to the less able; the less able may well talk more freely to their peers than to the teacher.

Finally in terms of opportunities there is the major change that is taking place regarding notes and note taking. Nuffield has emphasised the 'personal' nature of the pupils record of work and I think we must push this one stage further and break once and for all with the traditional sterility of scientific report writing with

its emphasis on the impersonal. What the child does and sees is unique to him at the time it occurs and his report should be a unique communication. The experiences can then be generalised with a sense of involvement on the part of the participants. Not only is the generalisation of events essential to scientific thinking, but the ability to generalise and relate our own experiences is essential to communication. Effective communication should lead to effective learning. It would appear that freedom for the child to express his experiences *in his own language* must come first. The language used may not be in itself scientific but it will be used in the context of a scientific experience. Out of this can grow the true language of science. Words used can become clothed with meaning and the child can move forward to effective classification of his experiences. The excitement of discovery need not be dampened by the problems of 'correct' verbalisation.

This analysis has concentrated on the opportunities that exist for encouraging effective learning within the context of existing courses. It would be false to suggest however that all the answers are to be found from within our existing courses and our existing methods. The following areas seem fertile for both investigation and action in most schools as the problems of language are common across all subjects.

There is much evidence that a child's ability to solve problems improves with increasing ability to express the problems symbolically through language. It seems that the pupil who lacks a symbolic means of tackling problems tends to rely on guesswork in solving the problem, even at upper school level. Pupils with high linguistic ability, on the other hand, use the symbolic property of language to determine strategies for the systematic solution of the problems. A concerted effort in all subjects to overcome difficulties created by environmental factors would improve total performance.

A closer co-operation is required between specialist subject teachers and linguists in the preparation of reading material for school use. Words and structures must be chosen from both points of view for at present most material is either too difficult to read or if it can be read tends towards nonsense from the technical point of view. This is particularly vital at the Junior/Secondary level where no concepts can be *assumed* but at which the key experiences out of which the concepts will grow must take place.

A concerted effort to keep open a situation of inquiry and exploration in all subjects seems essential. This involves in the early stages of education oppor-

tunity for all pupils to describe events in their own language, with excitement and spontaneity, and later the opportunity to seek to explain those events. It is in this way that they will come to terms at a later stage with both objectivity and precision. I think confidence in this area and the greater maintenance of freedom of expression could be improved if more use were made of inter-subject experiences.

Finally we must move away from the present pattern of curriculum reform where subject specialists attempt *on their own* to solve problems that essentially require a *variety* of approaches by teams containing a *variety* of talents. This applies both within individual schools and at the level of regional and national projects. Team work alone will allow for the full exploitation of the potentialities for both research and development in fields such as the one discussed in this article.

#### References

<sup>1</sup> Nuffield Chemistry *Introduction and Guide*, Longmans/Penguin (1966).

<sup>2</sup> Bruner, J S, Goodnow, J J, and Austin, G A: *A Study of Thinking*, Wiley (NY, 1956).

## ACE Conference Teaching Unstreamed Classes

Fitzwilliam College,  
Cambridge.

2-4 January 1970

A study conference for teachers in secondary schools—with special reference to comprehensive schools—and others interested in working with mixed ability groups at secondary level.

The conference will be subject based and is designed to deal with the actualities of the classroom situation. Subjects will include English, maths, science and history. The aim will not be to debate the case for or against streaming but to explore what can be done once streaming is abolished.

Further details of the conference can be obtained from Richard Blake, Advisory Centre for Education, 32 Trumpington Street, Cambridge.

# Discussion



## Less P and S

I should think it is commonplace among teachers of English that children in an unstreamed, non-selected form can all write well on the same subject. The subject must be related to the life they share; but, then, it ought to be so related in any case. A universal ability to write well, especially in an imaginative way, should not be obscured by differences in mechanical correctness. I would go so far as to say the mechanical perfection of a faultlessly spelt piece of writing can in some ways be inferior to 'errors', which may reveal considerable taste and originality and should be rather called 'inventions'. Similarly, superior realism may be shown in 'errors' of punctuation: the writer has made a selection from the points of punctuation available to suit his own needs. It seems to me that it is arguable that, however much they were exploited in formal eighteenth century elegance, colons and semi-colons are dispensable for many



children all the time and for many more much of the time. Such punctuation was necessary to Victorian Arnolds and Macaulays travelling in great furniture vans of half page sentences but not to a modern child with a sufficiency of ideas and feelings of his own handily in a swag bag.

While I am appearing to lament the way in which the dictionary and 'Rules for Compositors and Readers' have frozen our language, it may be objected that precision and standardisation can sometimes be vital. I do not object to accuracy where it arises naturally, but would suggest that scientist and mathematician often already prefer to use symbols on such occasions.

Large variations in mechanical correctness are, it seems to me, a feature of the unstreamed form in the comprehensive school that should be accepted not merely with understanding but with interest. It would be heartening (and this is not impossible) if in a generation or two innovations in both spelling and punctuation spread from enlightened schools. In punctuation I think that factual writing – records, reports and instructions – could well come to be set out with hardly a full stop, the dash and bracket and suitable spacing and underlining serving instead to make the meaning clear. In imaginative writing it could well be that the writer could be admired for his new spellings, as I admired a boy recently for his 'conveyabelt', a name I should certainly adopt if I manufactured such equipment. There is scope within CSE for the recognition of such ability.

'Errors' in punctuation have, in fact, kept better pace with the changing outlook of our nation's youth than GCE examiners will admit to their marksheets. Losing the Empire and the Olympic Games and not even qualifying for the Common Market – all this is summed up when a boy refers to his nation as 'the english'. I noticed recently systematic exploitation

of the non-use of capitals to give point to a Sixth Form essay on the ambiguity of Browning's attitude to religion. How little religion meant to Browning in the opinion of the writer appeared in his use of 'church', 'christ' and 'christianity'. When one thinks of the first Elizabethans, their books full of capital letters for every noun, however common, one realises what a re-appraisal the use of 'queen' represents.

In spelling, it is hard to see why 'altogether' should escape red pencilling, when 'alsorts' and 'alright' are bloodily speared. However, logical improvements of this kind can be left to look after themselves: they are so obvious that they have to come – they are waiting only to come of age.

No, it is the evolution of more expressive rather than more logical spelling that I wish to advocate. Who has not felt how apt is 'dinning room'? How much firmer a bridge sounds that is 'supported'. How much more tellingly pathetic it is to hear that 'they lost their soul possessions'. How

much better a summing up of the multi-million dollar jamboree the American electorate had recently is 'The Americans are having a present'. The trade at least will learn, I expect, that a variation such as 'ghellied eels' has a superior look about it that might even put it in the oyster price range.

The movement has distinguished literary backing. James Joyce treasures words in his mouth like well parked gum and turns over their possibilities. No one can fail to feel how superior to every other character's dialogue in Wells's *History of Mr Polly* are Mr Polly's inventions. When a boy explained to me his travels in the classroom by a quotation from Mr Polly – 'Explorations meanderings' – I felt he had profited from his Eng Lit.

May I give you a start to your list: 'blastphemous', 'infiltraitors', 'a modicrum of cheese' . . . I trust you will become a collector.  
STANLEY COOK, *Oastler College of Education, Huddersfield.*

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## Group study in a College of Education

Mr Altman's article in the last edition of *Forum* raises a number of important and interesting issues about teacher training and the nature of the learning process. There were some matters which were, perhaps deliberately, not raised but which ought to see the light of day. This note is intended to try to call attention to some of these buried assumptions, some of which are valuational, others empirical, in nature.

It is assumed throughout the article, almost axiomatically, that group learning is desirable in the sense that (a) it is to be preferred in a general sense to individual learning as a method of instructing children and (b) as a way of initiating students into (i) knowledge and (ii) desirable attitudes. The case for the desirability of group learning is nowhere argued; such an argument might rest on logical, ethical and empirical grounds.

What is argued is that students ought not to be subjected to a theoretical/practical dichotomy. This is probably desirable but may be achieved in ways other than that suggested by your contributor: for example, he may care to examine the theoretical advice being proffered to his students and decide whether it is characterised more by enthusiasm than scientific detachment and caution.

There are several other assumptions which are lying doggo and which might usefully be flushed out. The basic one is referred to above, namely that group learning is superior to individual learning. One might ask: 'for whom?' Is it really true that what may be appropriate for young children is also appropriate for a highly-selected group of young adults? The effectiveness of this exercise might be judged more easily if its purpose were clearer: is it to maximise learning or to affect student attitudes in a desired direction, and, if the latter, we may ask again - 'Desired by whom and on what grounds?' It does seem from the evidence presented that the unit of work is more concerned with attitude formation than traditional learning. 'Keeness', 'involved', 'initiative and ingenuity' are used to describe the results and few would dispute that these are qualities we look for in our students. One is less confident that any history is being learnt. We are told of students using nineteenth century log books, acquiring an architect's drawings, procuring a scale model of a modern school (activities, incidentally, which characterise the behaviour of squirrels and jackdaws); however, the acquisition of these items is hardly an activity which could support the description of historical study; a necessary pre-requisite to such study, certainly, but not of itself involving much 'history'.

One final point may be made. It is assumed that there will be a transfer effect: that students will be convinced of the value of such methods and will

be prepared to use them in their own teaching. This is an empirical question which Bingley College might examine, especially as we are told 'The method will not suit every tutor,' with the implied possibility of control groups. (There is a further implication that such tutors are in need of some sort of therapy, poor things!)

Of course, it is much easier to demolish than it is to build. My point is that we might build more effectively if we were clear what it was we wanted to do - and we are all guilty at some time of failure to frame precise objectives. I have suggested that the valuational basis of Mr Altman's article - that group methods are valuable and therefore desirable - is unacknowledged and therefore unexplored and that there are a number of empirical questions going begging, too, about the nature of learning and the question of transfer. I would suggest that *Forum* bears at least a vicarious responsibility. In the same issue we have an anonymous reviewer of 'Perspective (sic) on Plowden' characterising the bulk of the work as 'tendentious and misleading'. I should have thought that 'rigorous and challenging' were more fitting, and in any case it is a volume that ought not to be dismissed so abruptly. Nanette Whitbread, again in the same issue, impatiently dismisses Professor Hirst's 'concern to clarify concepts' apparently on the grounds that what he has to say is too difficult to understand, although she concedes its importance. We neglect such clarification at our peril. If it is not done thoroughly we tend to proceed into any change enthusiastically but with assumptions which are untested, sometimes unrecognised and occasionally contradictory. The result is depressingly predictable.

T E CROMPTON,  
*Edge Hill College of Education.*

## Against individualised learning

Mr M Tucker suggests that the heart of the problem of mixed ability groups is how to individualise learning. Individualised learning, more particularly in English and maths, has been carried out intensively in special schools for many years and in my opinion it has little to commend it.

What I do believe we need in secondary schools are more teachers of general subjects who will concentrate in finding out more about children's individual needs. Find out what they want to study, how at times they do concentrated work on their own and at other join in the activity of a group where enthusiasm for subjects spills over and many differing talents are shared. The individualisation that occurs is that the pupil engenders through his own activity.

Subject teachers individualising subjects immediately set up standards and divisions and many children will not make a conscious effort to break down the barriers.

When teachers find out more about children's individual needs it will be found that lectures in subjects will then be supported by pupils who have formed concepts or reached a level of maturity to enable them to take advantage of specialist teaching.

MRS M RICHARDSON,  
*Walton, Lancs.*

## How to review

Whilst I find myself in disagreement with many of the proposals put forward by Mr Eric Robinson in his book **The New Polytechnics**, I certainly think that his views deserve a more objective treatment than is accorded to them by your reviewer, Mr Holly.

The wrenching of quotations out of their context is an old ploy of the captious critic, but to assert that the rationale of Mr Robinson's endeavours is the assistance of capitalist interests is pure invention on the part of Mr Holly.

If the task of such reviewers was confined by you to telling us the substance of what an author has to say, then the readers of **Forum** might gain some information to their advantage. Their interests are not served by the mischievous attribution to writers of sentiments and intentions that are quite imaginary.

J HENDY,  
*Ealing Technical College.*

### *A note in reply:*

I am at a loss to know how to satisfy Mr Hendy. I thought 'the substance' of Eric Robinson's argument is what I *had* dealt with. At least half of the article was devoted to commenting on what I judge to be the salient points – and I accept that my judgement is as fallible as his. The second half, certainly, is used to question Robinson's thesis – but then a review is not a synopsis. As to 'invention' – I do not claim that Robinson's *purpose* is to serve capitalist interests (state or private): that this would be the *effect* is evident to me if not to Mr Hendy. I am simply inviting those who read the book to consider this point – again surely the function of a reviewer? As to 'quotations' – how does Mr Hendy suggest they be taken *except* 'out of context'? Is Mr Hendy suggesting that Robinson didn't write the things I quote – or that he didn't mean them?

DOUGLAS HOLLY.

## Too fast

I have read your interesting magazine for about two years and it is clear that its purpose is to a large extent the dissemination of propaganda in favour of (a) the universal

establishment of comprehensive secondary schools, (b) the adaption of unstreamed classes within those schools, and (c) the rearrangement of the curriculum in a manner quite unknown in the average grammar or non-selective secondary school.

Let me make it clear I believe anyone has the right to advertise his views propagandawise, but may I respectfully suggest that if the propaganda is to stand a reasonable chance of public acceptance then it is necessary to limit it to one main object at a time. In my own case, for instance, I am willing to give wholehearted support to item (a) in the list above, but until (a) is complete or nearly so, I am not willing to support items (b) and (c). This attitude is surely logical because we are not certain of the effects of any of these proposed changes and until every child is in the same boat it is surely unwise to use some as guinea pigs whilst others are given the standard, traditional treatment which, although it may have defects, is known to work at least in part. I am not ashamed to admit that I am worried about the educational prospects of my own eldest child who is due to go to a freshly established comprehensive school in October 1970. Under the old system it is in my opinion likely that he would have gone to a grammar school. Now, as I have written above, I fully support the idea of a comprehensive school, particularly if it is a neighbourhood school, for other types of school are then socially divisive, but what I do complain of is the possibility that he might find himself in an unstreamed class with a fancy curriculum when others of his age in other places are still taught in the traditional manner. Under these circumstances the gap becomes too great to be acceptable as an experiment in which one's own child is involved. One step at a time and you may be able to convince everybody, including me.

JOHN WINTERBURN,  
*Padgate College of Education.*

# Innovation in the comprehensive school

## Pat Daunt

Mr Daunt taught at Christ's Hospital, where he was also a Housemaster. He succeeded Tim McMullen as Headmaster of Thomas Bennett Comprehensive School, Crawley, in 1965.

Readers of *Forum* may remember the article in which my predecessor Tim McMullen wrote about the first seven years of Thomas Bennett School, and discussed, as director of the Nuffield Resources for Learning Project, the process of curricular innovation. I want this article to carry on the story of innovation at Thomas Bennett since I succeeded Tim in 1965. Since that time we have grown to be a school of 2,200 in permanent buildings designed for about 1,600. The pressures of size and overcrowding have not, I hope, diminished our aspirations, but they have made us look sharply at the organisation and means of communication with which innovatory programmes must be supported if they are not to misfire.

## Teachers: Combo and Discussion Groups

Advance into a higher Burnham group in 1967 enabled me to reorganise the departmental structure. We now have six faculties (English, Mathematics, Sciences, Languages, Humanities and Liberal Arts) which contain in them all the departments, and so all the teachers, in the school. The academic function of a head of faculty includes responsibility for curriculum development, including the planning of material resources and the leadership, where appropriate, of integrated studies. His 'political' function (by which I mean his role in decision-making and consultation on matters of policy) is first as a member of the central cabinet, which we call 'Combo', on which he represents all the constituent departments of his faculty and their members, and secondly as a leader of a discussion group.

Combo itself, which includes of course senior housemasters as well as heads of faculty and other senior staff, goes back to 1966. Its very effectiveness suggested the dangers of oligarchy, and it was to meet these that I devised the discussion groups. On one afternoon each

week the staff meet in groups on a three-weekly cycle of departmental meetings, meetings of house staff and discussion groups. These last discuss and make recommendations on major routines and policies affecting the social or academic life of the school. They may initiate agenda, but each time a meeting is due every member of staff receives from me a work-note outlining the proposals at issue. Group recommendations are put forward to Combo, in writing if necessary, by Heads of Faculty, and the decision made by Combo (or by myself if Combo is divided) is published in minutes and may be further interpreted by the Head of Faculty when the group next meets.

At first, in the autumn of 1967, there was a good deal of chaos. Only the chairmen of the groups had work-notes then, and I tried to get the groups to work through several important topics in one go. Since then know-how on procedures has enabled groups to do good work and, particularly in matters of social development, to affect decisions crucially and in detail. But of course the groups disagree between each other like fury, so that very often a group is faced with an unwelcome final decision—and the group leader with the unwelcome task of defending it. It takes two sessions, which means half a term, for the groups together with Combo to thrash an important matter out: there is still too much to be discussed in too little time, and the two-tiered structure can seem remote as well as slow-moving.

So we may evolve, and modify the system. Discussion groups have improved communications about decision making beyond recognition, and have advanced genuine involvement in decision-making substantially but imperfectly. There is a nostalgia for informal discussions with the Head in common-room over cups of coffee, and this—though difficult to operate with over a hundred staff—may be an essential ingredient that we lack. But, though we may modify the procedure, we shall make sure not to give any of the ground we have made.

## Parents

Meanwhile, other stars have risen over our horizon. Our long-founded house PTAs now send representatives to a newly constituted Central PTA. Here senior teachers and parents join to plan the year's programme of communications to the parents at large—increasingly essential where a school is innovating and parents can easily lose track of its aims and operations. Supported by the Deputy Head's 'Parents' Post' to all parents, these discussions have had startling results, with over 400 parents for example attending a third-year parents' meeting this spring. In fact, the constitutional powers of the Central PTA are still extremely limited, and its members loyally and modestly reluctant to trespass. But they are, as it were, in the wings, ready to come on stage when called.

## Students

I have mentioned the work of the teachers' discussion groups on the social development of the school. It was these groups which, after much heart-searching but with eventually resounding agreement, created the constitution for an entirely new School Council which came into office this April. Our earlier School Council had been a useful means of communication between the Head or Deputy and some (not many) students, but isolated from any important process of decision-making and totally alienated from, generally despised by, the teaching staff. The new School Council comprises a Head of Faculty as Chairman, four teachers representing the four houses, an elected head boy and girl and twenty elected students, each house-year being a constituency. As well as the traditional functions of running school charities, clubs, social events and community service, the School Council has powers which are perhaps less commonplace, controlling its own budget and being responsible for presenting to Combo the complete code of school rules.

But the new legislators must see to the effectiveness of their own code. From next January our traditional school and house prefect system will be replaced by a system of collective student responsibility answerable to the School Council. This has been the toughest decision we have made, since the house prefect system had many ardent defenders. For the first, perhaps the last, time in its history I had to ask Combo to vote.

## Teachers, Parents, Students

For a long, long time our schools have been bureaucracies of office-holders. Delegation, in the common use of the term, means delegation to an oligarchy: this improves efficiency, but in no way weakens the bureaucratic pyramid which merely becomes steeper. I believe that such structures tend to put us on the defensive, and may lead to inconsistency in our feelings about students and their parents.

David Guthrie came to Thomas Bennett, and went home to write an article for *New Society* proving that the state schools can't be progressive: so much for our pretensions! But we can try. Hidden assumptions which block the path must be dragged out into the light: for example, the belief that 'if people cannot always get their way they would rather not be asked' (which is to say, 'all men are infants'). In three years at Thomas Bennett we have only begun to find ways in which teachers, parents and students can become aware first of their proper autonomies and next—harder still, this—of their interdependence. It is also true that not everybody wants to go this way at all, and there is no point in disguising the fact.

## Curriculum

Meanwhile the six Faculties, I honestly believe, have the curriculum in a firm grasp and are advancing with growing confidence and sureness of aim. The pressure of work on leading teachers is terrifying, relieved only in two instances where we have won curriculum planning time by generous grants from industry (under Nuffield auspices) and the University of Sussex. Mode Threes proliferate to such an extent that we wonder whether we are responsible for our Board's decision not, after all, to pay the costs of duplication. As well as the majority of our main-subject middle-school CSE work, Mode Three will serve three courses devised specially for the one-year sixth, and two 'O' Level courses with the AEB Board, one of them, examined also at CSE, a major integrated course in Humanities taken by the whole population on the fourth and fifth years and certificated as three subjects (History, Geography and Social Sciences).

But we are determined that all this departmental activity should make sense and serve the ends of an overall curriculum which is well-balanced. We are strongly opposed to half-baked inter-disciplinary

flights of fancy, to the proliferation of options, and to programmes that may interest and stimulate the children but serve no definable learning objectives. One of the aims of the middle-school Humanities programme has been to eliminate options over a broad area where they have been traditionally frequent and particularly meaningless. Similarly, virtually all children (including the most able) are or will be pursuing one of the creative arts as a main examination subject to the end of the fifth year. Our aim, not yet fulfilled but well on the way, is to consolidate the middle-school curriculum, in two senses: both by reducing options between subject-areas to the minimum (since Mode Three allows for considerable individual choice within these areas) and by diminishing the difference between the curriculum of the most and least able children. We believe that a crude Newsom approach—replacing ‘academic’ by ‘practical’ subjects wholesale—both sells the less able children short and devalues the universally pertinent objectives of the subjects styled ‘practical’. Mode Three, again, offers a solution, in enabling us to present a subject in different ways at different levels.

So much—necessarily brief in an article of this sort—for the substance of curricular innovation; what of the process? Discussion groups, though concerned with the routines and major administration which support the curriculum (reports, grading systems, internal examinations) leave the curriculum itself to the Faculties. But the pattern is different from that of our social development in another way too, in that in almost all our curriculum advances we have sought the help of outside agencies, partly—of course!—in the hope of financial support, partly for encouragement simply and advice. It seems to me essential for a school to have external advice in this way if teachers are not to be fooled by their own environment or blinded by their own background. Our chief allies have been the obvious ones: the Inspectorate (almost the only source of support in the creative arts), the Schools’ Council, the Nuffield Foundation and the Institutes and Departments of several Universities, notably our own at Sussex. Here, without bitterness but with some astonishment, I must make a contrasting observation. Ten years of teaching practice or students’ visits has established a relationship with our neighbouring Colleges of Education which is amiable but, as far as curriculum development is concerned, quite infertile. Four years of co-operation with the University of Sussex in their Tutorial Schools Scheme for PGCE

students has led to a network of contacts, and I believe the restoration of a kind of relationship dead for a hundred years, between leading teachers and members of the University; on this foundation has been built the support which our University’s Centre for Education Technology has given to our Humanities programme, as part of its general programme for the resources of learning in the five Sussex authorities.

This programme however serves a large area, and there is still much to be done to fill the gap between the CET and the totality of individual schools. Teachers’ Centres in West Sussex, as in many other places, have so far been limited in their aim to the support of specific Primary projects. A group of primary and secondary heads in the County (of which I was a member) presented to the LEA last January a report on Teachers’ Centres which called for Centres serving much wider and deeper aims and relating to the whole field of curriculum development, both primary and secondary. Crawley has been chosen for the first of these, and it is possible that its premises will be incorporated in the new buildings at Thomas Bennett which should be available early in 1971. If so, curricular innovation for us and our neighbouring schools will enter a new phase, with a much closer primary/secondary liaison which is essential in view of the imminent creation of Middle Schools in our area.

Finally, to return to the balance of the curriculum overall. This I have chosen to make my personal responsibility, as is the construction of a timetable which, God willing, will accommodate the whole and its elements. The more carefully aimed and planned curriculum projects are the severer the demands they make on the timetable in terms of the size and constitution of groups as well as the length and distribution of teaching periods; I am convinced therefore that, wherever there is substantial innovation, the director of studies (whether the headmaster or not) must also be the timetabler.

But the determination, from the diversity of specific curriculum developments, of a new harmony of total curriculum is a task indeed, and I am alarmed at the amateurishness of many of my judgments. Here help from outside is exiguous. Though the Head of our Humanities Faculty has used Bloom’s taxonomy effectively, I personally find it terrifying. More hopeful, for me at least, are the ideas put forward (eg in this May’s *Journal of Curriculum Studies*), by Professor Hirst, and I am hoping that the Schools’ Council group who organised the Curriculum conference at

Exeter University last September may go forward with discussions at this level.

## Social and Academic Life : Unstreaming

As well as being concerned with social and curricular development, we are trying to give serious attention to the relation between the two. To put this in its problematic form, we are anxious about the conflict between the informality of most of our contacts with children and the comparative formality of some of our teaching situations, between on the other hand an increasingly Socratic approach to learning and what is still a largely bureaucratic 'political' structure. It is important that it is not a question of 'softening' academic processes for social ends or vice versa; the conflicting elements appear in both sides of school life.

I believe this is an extremely difficult problem to grasp with any clarity, let alone solve. What after all is the *objective* difference between reasonable consistency and imposed uniformity, between disrupting conflict and harmonious diversity? One must be content with subjective criteria: if a conflict is felt, it exists. And the conflict, though not I think acute, is felt to exist by some teachers at least. Contrast between the pastoral role as house tutor and what is in some situations a far more formal teaching role may lead some into dissatisfaction with classroom relationships; others may find the more formal relationship congenial but be thwarted by poor response from children accustomed to a different relationship not only in tutor group but in other lessons too.

I endeavoured to state this aim of harmony between academic and social life in a document called 'A Look at 1970', which I circulated to the staff in January 1967. In preparing this I was much helped by the Exeter College sessions of the CRAC course 'School Management in the 1970s'. My document was a specification less of projected innovations than of lines of innovation which we ought at least to consider seriously. It has I think proved a useful framework for our thinking and talking, and quite a lot of ideas I outlined then have come to fruition ahead of schedule, or are likely to meet the deadline. But quite a lot have not, and at the heart of them lies (I am sorry to say, here of all places) unstreaming. If some of us at TBS are not at this moment talking much about unstreaming it is because we do not know what

to say, and that includes me.

Though for half their timetable (Humanities and Liberal Arts) all children on the first three years will be taught next year in house groups, it is likely that only the Liberal Arts will be totally unstreamed. The Humanities Faculty hovers on the brink, held up by reservations with which I agree. The English, Mathematics and Languages faculties are unconvinced that unstreaming will not harm the most and least able children. As for science, Don Reid's carefully evaluated Nuffield Biology project, now completing its second year and already reported in *Forum*, gives strong support to individually programmed learning but none at all to unstreaming.

Clearly, learning aims must not be sacrificed to social ends, but with 'lower block' children the distinction may be an unreal one. Motivation is for them above all critically important and the truth is that, although we register most heartening successes with some of these children at Thomas Bennett, there is a significant measure of failure which we cannot ignore. Yet it is not self-evident that total unstreaming in all subjects is either the only solution to this problem or the best one; no responsible unstreamers, as far as I know, plan to teach totally mixed ability groups as if they were homogeneous classes, and it is to say the least not obvious that the motivation problems of slow learners would be solved by giving them special attention in sub-groups instead of in sets. Successful primary practice is no evidence, unless we are virtually to abandon specialist teaching in the early years of secondary schools.

One type of alternative would be to rethink the teaching organisation in English, Mathematics, Languages and Science of at least twice as many children as the two classes at present catered for by our remedial department. The choice between the two policies we shall debate and decide this autumn, so if readers of *Forum* are interested in the outcome, there could be a postscript to this article before long.

## Beyond 1970

Innovation is exciting but, even for a young and adventurous staff, exhausting. Hence my intention in January 1967 to set September 1970 as a target-date for major changes, after which we could look forward to a period of comparative stability and consolidation. But new buildings in 1971 will inspire fresh depart-

# Slow Learners in Comprehensive Schools—*inclusion versus the special group*

**Peter Blacklaws**

Mr Blacklaws was Head of the Remedial Department at Langdon Park School, Stepney, and is now Adviser in Remedial Education to Waltham Forest.

My brief is to discuss the slow learner in the Comprehensive school, with particular reference to the desirability of retaining the special slow learners' group.

I shall first give a short definition of 'slow learner' and describe his varying situations in the different kinds of Comprehensive schools; and then I shall tackle the main issue.

By 'slow learners' I mean those children who, in their First Year of Secondary education, are *generally* so backward in coping with the social and educational demands made upon them (including the need to read) that they can only operate at or below the level of an average nine-year-old. In addition, experience of persistent failure will probably have introduced emotional difficulties, or will have aggravated those that may have been present from other causes.

It is common to refer to slow learners as 'remedial children' but, where possible, I prefer to keep this term for those children who are not *generally* backward, but who are retarded in one or two specific aspects of their development. Although the slow learner and the remedial child will usually be the responsibility of the remedial teacher, it is essential that we keep the two categories separate in our minds. It is bad for the remedial child to be included in a group that is predominantly slow learning and, given sufficient staff, this should be avoided.

I shall now divide Comprehensive schools into five categories.

1. **The rigidly streamed school.** Here the slow learner will spend nearly all his time in the company of other slow learners, with (often) the additional company of some remedial children.
2. **The band-streamed school.** This is the school with streamed ability 'bands' containing parallel classes within each band. The slow learners may be distributed throughout the parallel classes of the lowest band but it is also common for them to be placed in a special group for some or all of the timetable.
3. **The de-streamed school.** Here the slow learner will spend about one-third of his time in a mixed-ability tutor-group for (usually) registration, Art, PE, Music, Games and Handicrafts/Housecraft. For the remainder of the time he will either be in the bottom ability sets for individual subjects or groups of subjects, along with a marginally variable number of remedial children; or he will be placed in a special group of slow learners.
4. **The non-streamed school (incomplete).** This school excludes the slow learner from what is otherwise a general situation of mixed-ability learning and places him in a special group for English and, perhaps, Maths and/or Geography-History.

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*continued*

mental initiatives as well as affecting our social and pastoral organisation; the wave of primary French will reach us in 1972 or 1973, and 'plowdenisation' probably at about the same time; reconstitution of the

sixth-form curriculum can neither be hurried nor indefinitely postponed, and so may well fall in the same period. If, therefore, substantial innovation is to be constant for the next five years at least, it is all the more essential that our critique of its processes remains searching and radical.



5. **The completely non-streamed school.** In this situation the slow learner will be extracted from mixed-ability groups and given extra remedial treatment for some of the time. It is not clear whether, in this sort of school, the extractions of backward children will be decided on the basis of specific 'subject' weaknesses or of more general learning deficiencies or of both. The second or third alternatives will mean the provision of exclusive remedial treatment for slow learners but, as this will be for a superimposed and uninfluential portion of the timetable, it should not be included in the category of a 'special group'.

One point must be added to this categorisation of Comprehensive school organisations. It will become apparent as the argument is developed that *no* school should regard itself as irrevocably committed to a specific form of remedial organisation—not even the completely non-streamed school. For if a school is to advance from the traditional mechanistic model to become an adaptive organism, continuing changes in its participant members will require continuing modifications in its internal organisation.

We can now tackle the main issue of inclusion *versus* the special group. And the root question to be answered is—what are the slow learner's educational needs? These are twofold.

1. The first need is for emotional security. This can best be defined by referring to those parental and *quasi*-parental relations which, from infancy up to about the nine-year stage, provide that delicate complex of trust-understanding and dependence-independence which is essential for the growth of language and learning.

Without arguing the point, it can be suggested that the *successful* achievement of mixed-ability learning in the Comprehensive school will entail the achievement of learning relationships of a '*quasi*-extended-family' nature; and that, with the addition of attachment to a favoured *quasi*-parent for some of the time only, there is no reason, in principle, why such a complex of relationships may not answer the main emotional needs of the slow learner.

2. Secondly, there is the need for an integrated language-thought teaching programme. This can best be defined in terms of the immature level of thought-and-language development which slow learners have reached by their first year of secondary education. By definition, slow learners are at least two years behind

their contemporaries in their reading and, more significantly, in their uses and forms of *spoken* language, and much skilled work has to be done to fill in the gaps which derive from early learning deprivations at the infant and junior school stages; and this work has to be done by means of teacher-learning strategies which will not offend the raw susceptibilities of eleven-year-old children.

Thus, for all those 'subjects' in which language plays an important part, the slow learner's language limitations must be recognised and provided for by means of a *total* programme of language learning. This total programme will come from two main sources: (a) from the slow learner's teachers, and (b) from the slow learner's chronological peers.

A decision on the relative advantages of inclusion and the special group will depend on which of these alternatives will, in particular circumstances, best meet the slow learner's needs.

To deal with the last sub-heading first, I don't think that we know enough yet about mixed-ability language interaction to be sure of its effects, for good or ill, on the slow learner's development, and much classroom research is needed before the picture will be clear. However, although I cannot argue the point here, I think that there is a *prima facie* case for stating that, once the group initiative for deciding the common level of language has passed from the teacher to the children (and this is almost a definition of mixed-ability learning) then the slow learner will have everything to gain and, with care, nothing to lose.

This leaves us with the satisfaction of those learning needs which teaching alone can provide. And here there can be, in principle, no general answer concerning the relative advantages of inclusion and the special group, since each school must make its decision with reference to the actual teaching talent available. But two general points can be made which may help to make these individual solutions as relevant as possible.

First, it must be accepted that, however much the special group can be disguised and supported by a good school environment, the residual ill-effects on both staff and pupils will always make it a *pis aller*. But once a school has decided that, *in its situation*, the learning needs discussed above will best be met by the establishment of a special group for an influential part of the time-table, then it cannot go back on that decision merely to avoid the social/psychological drawbacks of this separation. That is, avoidance of the *pis aller* of the special group can never take precedence

over satisfaction of the slow learner's teaching/learning needs.

Secondly, one must have every sympathy with the view that, if we waited for all or most teachers to be 'ready' for mixed-ability teaching, we would never get the thing started at all. Nevertheless, one must differentiate between the *educative* effects (on staff) of making a general organisational/philosophical shift and the *educational* effects (on children; in this case, the slow learners) of a dogmatic insistence on pushing through reforms on all fronts at the same time, without reference to the actual teaching resources available. Once a school, or an authority, has shifted its general educational philosophy, the onus is then on participant staff to justify departures from the new educational standard; but it must be accepted that many of these justifications will be, in particular circumstances, educationally unanswerable.

Recently I conducted a small survey among eleven obliging heads of remedial departments, and one of the questions raised was the number of teachers they would like their slow learners to have for those parts of the time-table which were covered by their departments. My survey was concerned only with the provisions they had made or would like to make, given the particular circumstances of their present schools and the actual teaching resources available. It was not surprising that ten out of the eleven plumped for the one-teacher-one-class arrangement—that is, the special group. For behind this preference is a present assumption that the remedial teacher is more *likely* to have the necessary combination of attitudes and skills with which to serve the slow learner's needs.

That this should be so—and my experience assures me that this is, *generally*, a correct assumption—can be no ground for claiming any special virtue for the remedial teacher; for his professional competence is as much the product of accident, training and loyalty to the ethos of his specialism as is anyone else's; but it does underline the distance we have to go in broadening the training and, therefore, the attitudes of subject teachers before the special group can safely be abandoned.

It appears, then, that there will be a lengthy transition period during which the option of the special group will be likely to predominate. This raises questions about the sufficiency of trained remedial teachers and, in the likely event of persistent shortage, of the contributory roles of certain subject teachers, such as

scientists. Unfortunately, in an article of this length, these can only be mentioned.

It also raises another question, and one that is central to the situation of the slow learner during the transition period. If the slow learner is to be separated for a substantial part of the time, can it then be said that his situation will be significantly better in the de-streamed school from what it would be in the streamed school? In other words, 'whaur's your social non-streaming now?'

I can best answer this question by referring to my survey. Because the non-streaming issue was not raised at all in my inquiry, it is surely significant that the comments on the attitudes of staff and other children towards the slow learner which I received from the streamed schools were markedly different from those supplied by de-streamed schools. (See Appendix.)

It is clear that what happens to the other children and staff in a school will be of vital importance to the morale of the slow learners and of their teachers. For the first service that the de-streamed school can offer its slow learners is to maintain the morale of its other pupils. The second service is to provide skilled remedial teaching, the purpose of which will be to create a suitable climate of learning for its slow learners—and that is the surest morale-booster of all.

We can now tie up our conclusions in such a way as to be applicable to the transition period, and to the future.

## The way forward

1. Like all educational dilemmas, the choice between inclusion and the slow learners' special group is one which must be faced by each particular school in its own way. And its solution will depend upon the actual teaching talents which are available to it.

At the present stage of educational development I would expect the special group to be the most generally favoured solution.

2. If, however, 'transition' is not to be an excuse for perpetuating a compromise solution, every opportunity must be taken to move towards mixed-ability learning. Thus, when, at any point in the compilation of the slow learner's time-table, the balance of teaching capability is equal, or is in favour of the subject teacher—either because there is simply not enough trained remedial staff in the school; or because a remedial

teacher's qualifications are suspect on any major item; or because a subject teacher is as well equipped, or better equipped than a remedial teacher—then a partial or, if applicable, a complete retreat from the *pis aller* of the special group will be justified. But, it must be repeated, it is the satisfaction of the two teaching-learning conditions which must come first.

3. A correspondent in a de-streamed school described the future plans for his school: 'With the growing development of non-streaming in the school, and the increase in our skill in teaching effectively by this method, I hope to see a situation where the norm is that *all* children be taught by subject teachers in a mixed-ability situation, with extraction for remedial treatment where it is clearly desirable'. When this is achieved two things will have happened. The remedial teacher will have found his ideal role, which is to identify and remedy the basic learning deficiencies of the slow learner and the specific difficulties of the remedial child; and the Comprehensive school will have found its ideal role, which is to take children from a Primary learning relationship with one *quasi*-parent into a more complex set of Secondary learning relationships with a *quasi*-extended-family.

Even in this situation a school's extraction policy will surely take account of the differences between slow learners and remedial children and will treat them separately.

In the end, then, the whole thing boils down to good teaching, for comprehensive mixed-ability learning will transform the subject teacher into a 'compleat' or *comprehensive* teacher. The disappearance of the special group awaits the Comprehensive school which will be staffed by comprehensive teachers.

## Appendix

In the survey referred to in the main article I asked for comments on 'Non-Remedial-Attitudes'.

The following came from streamed schools:

'Some staff, a good one-third I would judge, believe that all the lower band girls should be either in an ESN school or be made to be like everyone else.'

'On the part of staff there was an initial general attitude that remedial work was for inferior, or at least crackpot, teachers.'

'Other staff vary in attitude. Some are sympathetic but others just cannot tolerate our children, on the grounds that "they too have problems of their own".'

'The attitudes of non-remedial children fall roughly into similar categories as staff. Remedial children are fully accepted by some, tolerated and wondered at by many, openly criticised by a few.'

The following came from de-streamed schools:

'Many, particularly ex-Grammar school teachers, are worried by the presence of less-able pupils in their groups but they are not hostile, simply aware that they are not at present doing justice to these children.'

'Generally, staff are kindly disposed to Remedial children, probably because of the pre-Comprehensive tradition of remedial classes in the two Secondary Modern schools.'

'Non-remedial children show very little, if any, discrimination against slow learners. This is probably due to the fact that we do not have a system of "forms" but have instead a tutor-group system.'

'There are mixed-ability groups for Art, PE, Games, Handicraft and Housecraft. Most Houses have a residential week during the First Year at school and we encourage our children to take part. We find that they integrate well.'

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# Building for education—looking forward

## Henry Swain

Mr Swain is architect to the Nottingham County Council. This article is a slightly abridged version of a speech given to a conference of the Royal Institute of British Architects, held at Cambridge, in June, 1968.

In Britain we build a lot of new schools. Almost every village and town has one. Often this is the best, sometimes the largest building, yet you often have to search for it. Hidden behind long rows of semi-detached houses, with a narrow inconspicuous entrance, it might seem by this siting to play very little part in the life of the community.

Yet the idea of siting and designing schools for use by the whole community, which could be the obvious centre of a large part of the local life, became the policy of the Cambridgeshire County Council in 1927. Henry Morris, the brilliant and far-seeing Secretary of Education, proposed that the secondary schools of rural Cambridgeshire should become village colleges, the community centres for a group of villages and a focus for the active educational and recreational life of the area. Architects sat up and took notice when in 1939 Impington Village College, the fourth of these projects, was opened. Henry Morris had appointed as the architects Walter Gropius and Maxwell Fry and the building they designed crystallised in architectural form his new concept of a school. One of the best examples of modern architecture before the war, Impington set a standard which post-war school design has taken as a starting point. But, as a building which recognises in its design the needs of both children and adults, it also commemorates ideas on education advanced forty years ago which are only now being accepted. Henry Morris deserved architecture of this quality.

Local education authorities are authorised to provide for adult education by the 1944 Education Act, and the demand has been growing steadily, but Morris's idea that the education of children and adults is a single process has yet to be widely followed. This is understandable; the schools are overcrowded, there are not enough teachers and the available money must go to meet the basic requirements of educating the increasing number of school children.

In Cumberland, however, Gordon Bessey has seen adult education—in its widest sense—as part of the job of schools and has repeatedly stressed the need to meet

the growing demand. The 'centres' he has organised are based, as in Cambridgeshire, on the secondary schools, and develop Morris's concepts. Wyndham School, Egremont, designed by the county architect Mr D W Dickenson, is the nearest approach we yet have to a school built for community use. At Wyndham evening classes—instead of being scattered around in inadequate accommodation in many separate schools—are given the status of a building designed specifically as a single centre for adult recreational and educational activities. When the thousand school pupils have gone home, the 500 students and club members of the centre—some of them pupils and ex-pupils—take over.

The problems solved at Wyndham by the architects of the Cumberland County Council are beginning now to be identified elsewhere. The change to comprehensive education, the greater number of children voluntarily staying on after the age of fifteen, has triggered off new thinking about secondary school building. There are signs of radically new thinking in terms of buildings designed deliberately for use by the community.

For this there are four distinct and separate reasons. The first is the new trend in school education—the schools are turning outward and making increasing use of talented people and facilities in the locality. The wide ranging field studies and the community service projects which are becoming a normal part of school life are examples. If more pupils are to stay on voluntarily in the sixth form, education must be 'realistic', and, in the words of the Newsom Report, "realistic" means belonging to the real world, that is to the world of men and women, not of school children.'

The second factor is the growth of adult education, to which I have already referred. Further Education colleges cannot cope with this single-handed. In every town and village there is a growing need for more facilities for academic study, vocational training and retraining, the acquiring of different skills. In the coming years further education may well be the most crucial aspect. Over a million adults attend classes in

secondary and primary schools as it is, for the most part, scattered in improvised classrooms in different schools, and crammed into uncomfortable desks. If there were proper, centralised, accommodation, which didn't make adults feel they were going back to school, perhaps there would be another million.

The third factor is the growing need to enable the active use of leisure time. Despite television, more and more people are taking part in active sports, recreational study, drama, or acquiring craft skills. This demand was crystallised in my mind when an education officer in Nottinghamshire asked sadly, 'What is the use of providing all those facilities in the school for teaching people how to swim and play games when they are not available to them after they leave school?' There are also the sad groups of motor cyclists in their black jackets, killing time. They do not say anything but their presence suggests something is missing.

Lastly, there is the economic argument. There is a huge national investment in school buildings but they are often in use not more than a third of the day for two-thirds of the year. Can we really afford not to use them more intensively, especially given the needs outlined?

## A community centre

What emerges from all this is a conception of a school as something more than a specialised building. Education should be seen as a process that involves people at various stages in their lives without distinction between recreational, vocational and academic studies. But, to my mind, even this does not go far enough and it might be better to say that what is needed is a central community service in which education itself is but a part.

It could be that to concentrate the building requirements of a community of, say, 15,000 on a comprehensive school—open late every night and at weekends—would be to provide for many more social needs than does the present policy of isolated investment. Perhaps a natural by-product would be to make education more 'realistic'.

What are the various facilities which might be associated with, or share the accommodation in, a comprehensive school in such a community complex? Here, perhaps you will forgive me if I talk about the comprehensive schools at present under construction in

Nottinghamshire. In the spring of 1965 the Director of Education, Mr WG Lawson, and I set up a development team consisting of two architects and two education officers to prepare a brief for the planning of a number of comprehensive schools. This team spent about five months visiting schools, recording what was happening and what were the emerging trends in comprehensive education. It found that demands on school accommodation outside school hours were considerable and the final brief defined the need for public facilities in the comprehensive schools.

## The new designs

The schools now being built to this brief have various aspects designed for public use. The concert hall can clearly play an important part in the life of the town as well as the school. It can be used for visiting professional concerts, amateur music groups, dances. It is probably the best concert hall in the area. Similarly, the theatre, with flat stage and raked seating, could be used by the increasing number of amateur drama groups, by film societies, for big meetings. The foyer, with coffee bar, associated with these spaces forms a natural meeting place to focus the evening life of the building. Parent-teacher association group meetings can use the informal teaching areas and seminar rooms of the English Department or the informal sixth form common room. The Youth Club is in a separate building on the site but near the sports centre. In some schools youth clubs when not required by the members are often used by the pupils. Exhibition space is provided intended for visiting exhibitions as well as those set up in the school. A central refectory, capable of providing meals for maybe 1,200 children, can also serve evening students and the general public. It is good economics to use expensive kitchen installations at least twice a day and this could be the best restaurant for miles around.

The demand for sports facilities is enormous. The new schools under construction have large sports halls with separate practice areas, full size swimming pools as well as teaching pools, hard porous floodlit playing surfaces, squash courts, and sports clubs with coffee bars, licensed bars, common rooms, and administrative offices. For the sports centres of four of these schools large contributions have been forthcoming from the Urban and Rural District Councils; at Bingham the sum was £130,000, at Carlton over £200,000.

It is obvious commonsense to combine the money for school physical education with funds for local sports facilities. Both school and public get something much better than could have been afforded separately.

At one new school there is a residential unit for training youth leaders and for weekend courses for teachers. Used for many other purposes, this has brought life to the site at night as well as making the school facilities available to residents in the hostel. There is a need to provide some boarding accommodation for school pupils but so far we have not found the money.

It is surprisingly easy to provide for the needs of adult evening classes, since the old formal classrooms with rows of desks are giving way to lecture theatres, seminar rooms, individual work spaces, and informal accommodation for the sixth and fifth formers. In particular, the coffee bars provided in the main foyer, sports club, sixth form centre, refectory, provide the informal conditions so essential for evening classes. While, therefore, at Impington a special wing was provided for further education, now the kind of room suitable for an adult group discussing the development of modern drama, or local history, is precisely what is wanted by the school during the day. Only students doing more advanced studies should need to travel to a college of further education with the necessary elaborate specialised equipment. Otherwise, about all that is needed, in addition to the normal school accommodation, is extra storage and office accommodation for the evening institute tutor.

## Future possibilities

I should like now to consider the future. What else might we combine in such a school complex? There should, if possible, be a public library on the site. At Wyndham School, Egremont, the public library and school library share a common reference area and are under one administration. This is economical and results in a better library.

The health centre should be a familiar and friendly building, an accepted part of the community. Where better to locate it than the school site where all the young people in the area go? This would help to relate the role of the school doctor and GP. Moreover, with the facilities of the sports centre available, might not the idea of Peckham Health Centre—that

the doctor is concerned with the health rather than the illness of his patients—be realised?

The Welfare Officer and Youth Employment Officer ought to have close personal relationships with the teaching staff, so obviously need to share in the centre. There could be a school for the handicapped on the site, usefully overlapping with the school functions. The Wyndham School runs a voluntary nursery which has enabled the school to get more married women teachers in exchange for lending some accommodation.

There should be shops associated with the school. This would help to create a normal background besides providing a useful service to the school. Why not laundrettes, hairdressing shops, newsagents? An extensive transport system is generated by a comprehensive school. In a rural area maybe thirty to forty buses arrive each morning and parking is required for up to a hundred cars. This can obviously be used in the evening and at weekends. And so one could go on. But these examples indicate the lines on which we are thinking and may have conjured up a picture of a school which really is a community centre.

## Problems of siting

I must now turn to the really difficult question. Where should such a school community centre be sited? Wyndham School is built in the centre of Egremont village. Staff and students use the town car park and shortly shops will be built leading up to the school. It is a natural and normal thing for members of the public to walk through the school, as of right, and perhaps sometimes drop in to see what is happening or drink coffee. After all, the citizens pay for the building, why should they not go for a walk, or push the pram, through the courtyards? Egremont is a small community so that a school in the centre can also be associated with its playing fields. This would not be possible in an urban area for, under the regulations, a comprehensive school requires maybe twenty-five acres and central area land values rule this out.

It is for this reason that our schools have been exiled to the perimeter, placed in the green wedges and green belts where land values are lower. I believe this policy is quite wrong. It should be recognised that we cannot have everything and that it is more important for the school to be in the centre of the community than adjacent to its playing fields. Again, by using

hard porous playing surfaces and floodlighting, it should be possible to get an equal amount of use out of a quarter of the area of land. If even this amount of land cannot be attained in central areas, it would still be better to have the school in the centre with indoor sports facilities, and perhaps one or two hard porous playing surfaces, and for pupils to travel out to playing fields at the edge of the town which are themselves part of a public sports provision. It may be, also, that the importance of team games—hockey, football and cricket—will diminish while they consume vast areas of land, at great cost with fewer people actively participating than in, say, swimming or sailing.

If I have made a case so far, then some of our ideas about town planning ought also to be revised. We should, surely, begin with the school located in the centre of its community and then fit the other things around. In the smaller towns and suburban centres shops and offices are dead at night. Some life can be discovered through the obscured glass of the pubs, teenagers form disconsolate groups by the parked cars. But only the brightly lit amusement arcades and the chip shop offer any alternative to staying at home and watching television.

By contrast school community centres located in the town centre would be a blaze of light, a centre of activity, every evening and weekend. There would be football and hockey under the floodlights of hard playing surfaces, swimming in the pools, judo, trampoline, cricket practice in the sports hall. There might be a public performance in the concert hall, a club amateur rehearsal in the theatre. Workshops would be busy, evening studies of all kinds in train. The public library would be operating, even on Sunday if I dare suggest this. People would be coming and going, meeting and talking, in the corridors and coffee bars—students of all ages, members of clubs or societies, university lecturers, teachers, casual visitors. This is to provide for the personal relationships, the interchange of views, which generates the core of any civilised community. Here is a meeting place something other than a multi-storey car park or supermarket.

If we build remote educational ghettos neither can education contribute to the community nor the com-

munity to education. For instance, at Cambridge or Bristol, the university adds to the quality of life of the whole city. Nottingham University is like a great self-contained liner anchored two miles off the coast.

## Committee rivalries

Why is it that it is taking so long, and proving so difficult, to realise the ideas of Henry Morris and Gordon Bassey. Part of the answer, of course, is the normal resistance to change. For instance, a school is a school and it is much easier having equipment and furniture to yourself. But part of the trouble, I think, is divisions within central and local government. To achieve a comprehensive community school requires a determined and sustained attack on the defensive barricades set up between further education, and departments for health, public libraries, town planning, and between parish, urban district and county council.

Collaboration with the smaller public authorities in Nottinghamshire resulted from the initiative of the clerk of the county council, and his ability to navigate the minefields of local politics. Now the Buildings Branch of the DES is designing a community educational centre with Manchester City Council through the offices of the town clerk. Acting as co-ordinator of the separate services that might participate in the scheme, he is making it a Manchester City, rather than merely an Education Committee, project. If this is necessary in a single county borough authority, it is even more so in a county where there are independent lower tier local authorities.

I will end, where I began, with Henry Morris. In the paper he presented to the RIBA in 1956 he said:

'In our time that element of unity in the life of society which is essential will be attained by the organisation of communities around their educational and cultural institutions. It is by some such synthesis that modern communities can again become organic, that the decay of civic life and architecture could be arrested, and the planning of modern towns on lines of imaginative significance surpassing the achievements of the past, be made possible.'

# Reviews



## Going Comprehensive

**The Evolution of the Comprehensive School, 1926-1966**, by D Rubinstein and B Simon. Routledge & Kegan Paul (1969), 113 pp, 8s.

**Comprehensive Schooling**, by M Miles. Longmans (1968), 99 pp, 12s 6d.

**Inside a Comprehensive School**, by H W Simmons and R Morgan. Clifton Books (1969), 110 pp, 18s.

The book by Rubinstein and Simon is particularly addressed to students in departments and colleges of education but this little volume deserves a much wider circulation amongst teachers, governing bodies, education committees and parents. There may be no blue print for the Comprehensives; it is necessary to fit into the local landscape, but there are certain basic ideas which must be accepted if the people involved in reorganisation are to develop the attitude and beliefs which will allow the schools to prosper. **The Evolution of the Comprehensive School** deals with the fundamental changes in attitudes; these determine the structure which evolves in secondary education as a whole and within the individual school. Margaret Miles and Harold Simmons show how teachers who adopt the developing attitudes can organise schools to provide the richer

experience and the equality of opportunity which the reformers desire. Rubinstein and Simon trace the development of new principles; the other two books show how they can be applied.

The historians of the evolution believe that the significance of the changes now taking place can only be grasped by looking at the last forty years. The story of these years develops a momentum of its own as the authors record the growing force of opinion which rejected predetermination at eleven as the foundation of a national system of education. The landmarks are carefully plotted: the parallel systems of elementary and secondary schools after 1902, the Hadow, Spens and Norwood reports. The differentiation between schools and between streams which the reports enshrined is related to the theories of the educational psychologists of the inter-war period. Cyril Burt's 1934 definition of intelligence and the claim that it can be measured with accuracy and ease has the ring of finality as a scientific truth. The quotation from Burt is the first of many which enrich the study and show how the opinions of psychologists, educationists, teachers and politicians ebb and flow but gradually develop the surge which culminated in circular 10/65.

The book succeeds in many ways. There is a very clear picture of the varying stages in changing organisation, there are the human responses to the idea of change, there is a splendid exposition of the compelling logic of the need for change. It is highly informative and often entertaining. My only reservation is that it could give the impression that all is now settled and most children have been planned for comprehensively. Recent reviews of progress and realities from the Comprehensive Schools Committee suggest that there is still a long haul.

Margaret Miles' deceptively simple introduction to comprehensive schooling provides the ideal follow up

to the wider history of evolution. It is rich in details of internal organisation and full of sound practical sense; there is warmth and understanding and a clear message about the optimism and flexibility with which new situations are met. Miss Miles ranges widely through the issues which affect a single school. Her years of experience have allowed her to crystallise her views on suitability of buildings, variety of courses, social organisation, communication and delegation. The changing sixth form and relations between school and community are also discussed. Miss Miles is far too modest to suggest that she is giving advice; in her circumstances and with her colleagues certain things have appeared to work. Given the basic beliefs which inform all that has been done at Mayfield, many of her solutions will provide valuable guidance for the growing comprehensive schools. The same can be said of Harold Simmons' book on Bedminster Down school, Bristol – particularly of the two chapters on mixed ability teaching, to which a lot of thought has been given at this school.

Because these books are eminently readable they will probably do much more than record changes in organisation which are taking place: they may have a very real influence on future development.

DEREK ROBERTS,  
*Bugbrooke Secondary School,  
Northampton.*

**The Grammar School Tradition in a Comprehensive World**, by J N Hewitson. Routledge & Kegan Paul (1969), 155 pp, 28s.

The headmaster of Norwich grammar school was enabled to write this book as a result of holding a schoolmaster-fellowship at Downing for a term. But the hope that it might be a serious study – instead of the



usual brand of talk out of the top of the head – is not realised. A brief introduction counts as one chapter and there are three others. 'The Perspective', 43 pp, is the usual kind of potted history, including an all too familiar (and altogether misleading) summary by a former headmaster of Harrow in **The English Tradition of Education** published in 1926. This doesn't exactly establish the grammar school's claim to respect for scholarship.

'The Changes', 55 pp, begins: 'Instead of generalising about the country as a whole, it may be helpful if I describe the experience of one working headmaster, lost in the Alice-in-Wonderland world of Comprehensive Reorganisation.' And goes on to relate how Mr Hewitson helped to organise other working teachers in a continuing critique of the plans of the authority, the ultimate result being that Norwich emerged with a thoroughly bad scheme for reorganisation.

'The Expectations', 47 pp, has, inevitably, sections on 'The classless society' and 'Equality of opportunity', ending, equally inevitably, with 'Maintaining intellectual standards'. Long quotations figure throughout – from the Newsom and Plowden reports, Lord James, an essay on gifted children and so on – but proper references are lacking. On p 151: 'But as we chat a little further another point rapidly emerges . . .' On p 152 the chatter ends with a credo and a cliché: 'I am optimistic enough to believe that traditions of this kind are strong enough to survive the present changes, and will be invaluable in the new pattern of schools that is just starting to emerge. I find myself therefore in good heart and spirits, my head honourably bloody, but completely and unrepentantly unbowed.'

If you can do with this kind of thing, here it is, for 28s. Though it is a little surprising that it should come from Routledge.

JOAN SIMON.

## Talking in class

**Language, the Learner and the School**, by D Barnes, J Britton and H Rosen. Penguin Education (1969), 128 pp 5s.

This important little book is the first of a new series designed as 'an attempt to close the gap between research and action'.

Its first part, termed 'A Study of Language Interaction in Twelve Lessons in the First Term of Secondary Education' and forming three-fifths of the book, is a report of a piece of research carried out under the direction of the University of Leeds Institute of Education, and consists of a detailed analysis of lessons given in four different types of school on a variety of subjects. The language material studied included a tape-recording of all the speech and an examination of all the written language that contributed to or took place in the lesson, set within an overall awareness of other factors affecting the language situation. The limitations of such a project, in terms both of the insignificance of the sample and of the problems inherent in subjective processes of interpretation, are made abundantly clear. But the analysis is conducted so openly and the general trends revealed so overwhelmingly established, that the final disturbing conclusions deserve close attention.

In the second part more tape-recorded material of children talking in class, with and without teachers, is presented and examined. The quotations in this section are of considerable length, and the analysis by James Britton looks at each situation in detail in an attempt to establish some of the ways in which talking and thinking can develop side by side. Finally, Harold Rosen introduces a document prepared for the London Association for the

Teaching of English entitled 'A Language Policy across the Curriculum'. He explains its genesis, makes some disclaimers about its form, but shows how it comes logically at this stage of the book as a climax to many of the conclusions already reached.

This book directs us to the need to look very closely through the language of the classroom at the processes of learning and teaching. It seems as though we still talk at our pupils most of the time. But do we talk in ways that are meaningful to them? We appear to underestimate their need to build on the understanding of direct experience before they can start to generalise and abstract. In consequence, we use what is called here 'a language of secondary education' and thus debar many of our pupils from any involvement. Moreover, by posing pseudo-questions or by restricting answers to a language register not assimilated by the children, we deny them the chance of learning by talking about their experiences. These seem to be more than matters to be solved by simple adjustments of 'method' and vocabulary. They are problems of unrecognised, perhaps unconscious, attitudes in all our teaching, and about our rôles as teachers. Hence the importance of the explorations set out in this book.

PATRICK RADLEY,  
*City of Leicester College of Education.*

## Foreign news

**Paedagogica Europaea. The European Yearbook of Educational Research**, 1968, W & R Chambers, 219 pp.

English educationists tend to be so insular that this annual yearbook is useful, whatever its shortcomings in some respects.

The present volume opens with an

interesting discussion of obstacles to educational reform in Europe, by M J Langeveld of Utrecht, which brings various publications to attention. For instance, M B Miles, *Innovation in Education* (New York, 1964), calculates that the diffusion of successful innovations may take approximately fifty years, not to take account of incidental retarding factors such as a world war.

Another reference is to 'an excellent book' on the future of French education which also underlines the deep cleavage between the periodicity of change in fundamental aspects of society in general and of education in particular. But there is nothing similar to refer to on Britain – though perhaps one may be thankful that economists here have yet to reach the stage of writing about 'strategy of human resource development' as they do across the Atlantic.

There are two other papers in English. One on secondary school selection and educational performance in the Netherlands draws on Bernstein's work. The other, 'The two cultures, Comenius and the Royal Society', by a Czechoslovak historian of science, is a useful antidote to some not very scholarly discussion of this question recently by two members of Oxford university.

JOAN SIMON.

## In the 1930s

**Susan Isaacs; the first biography**, by D E M Gardner. Methuen Educational (1969). 192 pp, 30s.

**An Outline of Piaget's Development Psychology**, by Ruth M Beard. Routledge and Kegan Paul (1969). (Students Library of Education) Paperback edition, 128 pp, 9s.

Ruth Beard's little book is rightly called an outline and ought to take its place alongside the pamphlets of

Susan Isaacs's husband, Nathan, and the short introduction by Mollie Brearley and Susan Hitchfield, which are already very familiar to college of education students intending to teach in primary schools. Most of the book consists of a very clear exposition of Piaget's views with a section on each of the developmental stages of his theory; in addition she writes a succinct but difficult first chapter on *The Development of Intelligence* which ought to commend itself to every rational educator here, with its emphasis in the last paragraph on social and educational factors as essential clues in the understanding of differences noticed when comparing the thinking of men in primitive societies with those in industrial ones. Generally, one concludes that Dr Beard has achieved her goal of giving the essential outline and only someone who is as adept in Piagetian concepts as she is could have written such a concise and worthwhile book.

Historically, however, the influences which were affecting both official and non-official thinking on the education of young children in England and Wales in the 1930s were those of Susan Isaacs rather than Piaget. 'She was asked to supply evidence for the 1934 Board of Education Report on Nursery and Infant Schools, and she wrote the chapter on the psychological development of children up to seven years, though she was disappointed that, in its final form her material was cut up and sub-divided more than she would have approved' (p 105). In this quotation and another on page 146, where she states that Sir Cyril Burt considers that Susan Isaacs's work was superior to and more exact than Piaget's in these early years, Dorothy Gardiner shows that Susan Isaacs was the important thinker who had the greatest influence on the minds of the progressive educators of young children and of infants between the wars. Perhaps some modern critics, overpowered by the influence of contemporary precision-mongering, might argue that Dorothy Gardiner's

first biography represents the over enthusiastic adulation of a first disciple but this delightful book gives above all a portrait of an extremely able teacher. As Sir Percy Nunn wrote of Susan Isaacs, 'What I have always admired in her is a combination of practical good sense and experience with philosophic thoroughness.'

The Bolton and Manchester University background of her early years, her important work as the energetic principal of the Malting House School in Cambridge in the twenties, her seventeen years as a tutor in WEA and London University tutorial classes, her interest in psycho-analysis and her great friendship with Melanie Klein, and lastly, her important post as the first Head of the Department of Child Development at London University Institute of Education from 1933-43, all contributed to the educational influence of Susan Isaacs. One is grateful to Dorothy Gardiner for giving us this portrait of her and for adding some important data to our knowledge of the background to the curriculum of the modern infants and junior school and one hopes that she will find the time to publish a collection of Susan Isaacs's writings such as her 'Critical Review of Piaget' published in 1929, and other pieces which are hidden away in journals, some popular like *The Nursery World* and others more serious like the *Journal of Genetic Psychology*.

Forum readers need to study this book and every primary school staff room and college of education library should have a copy on its shelves. Susan Isaacs will take her place with other important women of this century who have laboured hard to make the task of educating more reasonable.

ERIC LINFIELD,  
*Newton Park College of Education.*

## American research

**Pygmalion in the Classroom**, by R Rosenthal and L Jacobson. Holt, Rinehart and Winston (1968), 240 pp, 38s.

**Revolution in Learning**, by M Pines. Allen Lane (1969), 208 pp, 35s.

Anyone who is seriously concerned about possible strategies for raising the level of intellectual competence of children in the lower working class and minority ethnic groups will find these two American books challenging. The research and experiments described in each are very different, but both reveal a positive attitude to the intellectual educability of the socially under-privileged.

'Teacher Expectation and Pupils' Intellectual Development' is the subtitle of Rosenthal's and Jacobson's book. Part 1 recapitulates evidence, mainly from non-educational experimental research in clinical psychology, animal learning, psychiatry and medicine, much of which is fairly well known, in which the investigator's expectations of his subjects have proved to be self-fulfilling prophecies. Part 2 recounts and analyses two recent, comparable educational experiments conducted in public elementary schools – Oak Hill which was predominantly lower working class with one-sixth Mexican, and Crest Hill which was middle class. Part 3 discusses some of the implications of these and other research findings.

To test the effect of teachers' expectations on pupils' intellectual growth, random samples of children at these schools were arbitrarily designated as likely to show a spurt in academic ability in the near future:

the pre-test served the dual purpose of providing the base standard for subsequent comparison of control and experimental group children as well as lending plausibility for this forecast to the class teachers. The report is well documented with analytical tables and statistical data, plus an appendix of thirty-one more tables.

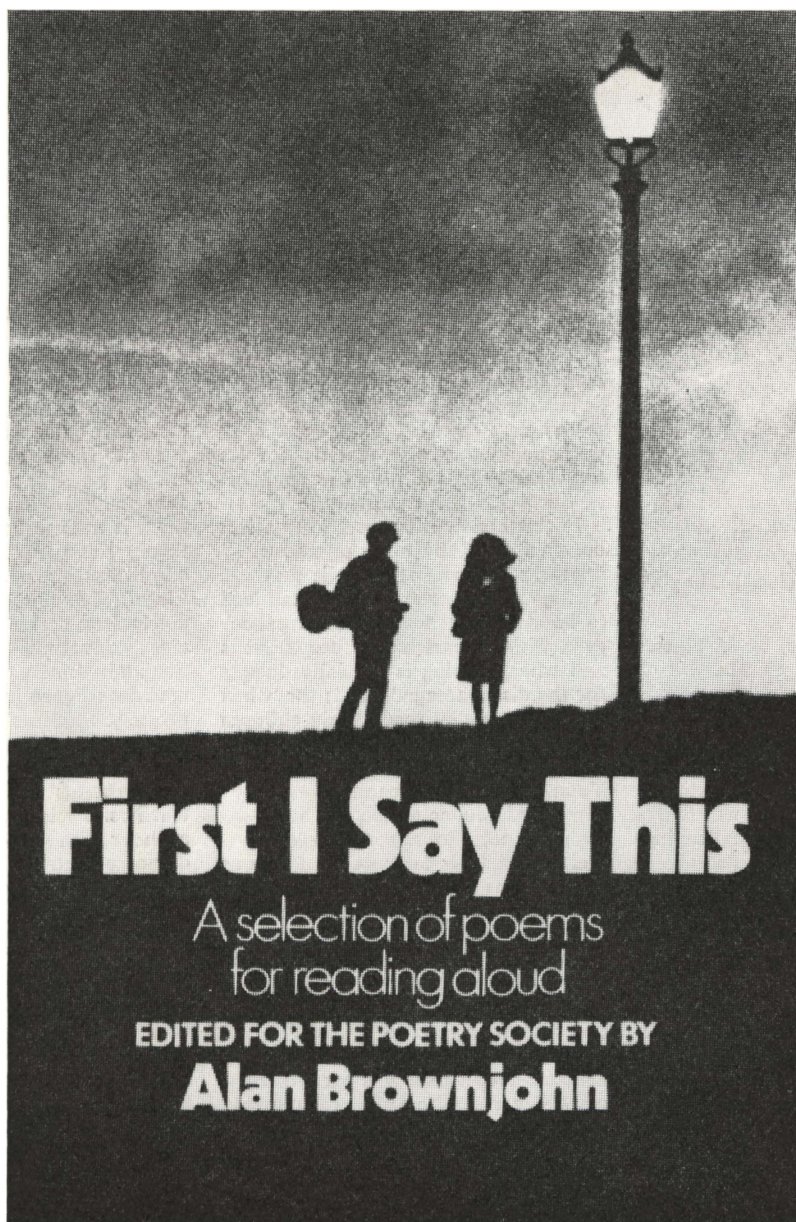
In this review it is possible to select only a few of the more significant findings. The central point is that 'change in teacher expectation can lead to improved intellectual performance' even without enrichment programmes and when nothing is specially done for the disadvantaged child: for 'when teachers expected that certain children would show greater intellectual development, those children did . . . ' Younger children apparently responded sooner to the teacher's higher expectations, but the older maintained their later gains. Previous research has shown that when children are categorised as disadvantaged their teachers expect them to be unable to learn much or to make much progress. In this context it is significant that the Mexicans showed higher gains in objective tests than in teachers' subjective assessments, and the more Mexican-looking showed particularly marked gains. The authors comment: 'one wonders whether among these minority-group children who over-represent the slow track and the disadvantaged of Oak School their gains in intellectual competence may not be easier for teachers to bring about than to believe'.

Subtitled 'The Years from Birth to Five', Maya Pines's **Revolution in Learning** consists of reports on a variety of pre-school learning experiments conducted in American cities, but all structured to promote intellectual growth rather than social adjustment which becomes incidental. Those conducting these experimental centres are critical of the much-publicised Head Start, and regard the typical nursery school as having relatively little to offer the underprivileged of the twilight zones.

The compensatory education described is all geared, though by a variety of methods, to teach such young children to verbalise, to use a more formal language than their restricted home code, to read and write, to form concepts, to generalise and to progress towards abstract thought. Pragmatic as much of this is, there is a clear basis in learning theory and psycholinguistics and considerable debt to Montessori and Piaget. Men of high repute in the curriculum development field are closely involved – J S Bruner and Benjamin Bloom. Sophisticated machines figure importantly in some projects. Students and voluntary helpers make possible the very low pupil-teacher ratios, and all schemes use assistants alongside trained teachers. Sessions are short, some only an hour with each shift: these are not day-care centres, though there is interest in these, too. A few experiments are with middle-class children.

As Miss Pines found, there is fierce disagreement between the traditional Establishment, 'concerned primarily with children's emotional and social development, and the innovators, who emphasise cognitive, or intellectual, growth'. The innovators are convinced that, particularly for children in the lowest social stratum, it is vital to introduce intellectual stimulation very early in life: they want children to be 'hooked' on learning.

Evidence is accumulating of the immediate gains and of vastly improved performance when these children start school, but so far longitudinal studies are lacking to show if the gains are held. Moreover, those presently engaged in this early teaching are committed people who clearly expect their pupils to progress. NANETTE WHITBREAD,  
*City of Leicester College of Education.*



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