FORUM

AUTUMN 1966 VOLUME 9 NUMBER 1 PRICE : THREE SHILLINGS AND SIXPENCE

The Schools Council at Work

10/65 and Non-Streaming Non-Streaming in Comprehensive Schools Conference Report by Ray Pinder **Planning to afford Education** John Vaizey The Schools Council at Work: **Introducing the Schools Council** John F. Kerr Searchlight on the Schools Council J. Stuart Maclure At School till Sixteen Nanette Whitbread The Schools Council looks at English Edward Blishen The Schools Council looks at Maths David Wheeler C.S.E. on Trial: Science J. F. Eggleston **Technical Drawing & Handicraft** F. Worthington **Home Economics** R. Adams A School Reaction to C.S.E. K. D. Bradshaw Discussion H. A. Hore, R. Haddon, W. A. L. Blyth Reviews E. Linfield, M. F. Welford, J. E. Stephens, B. Simon, S. J. Eggleston, N. Whitbread

FOR THE DISCUSSION OF NEW TRENDS [•]IN EDUCATION

RURAL BIOLOGY C. D. Bingham

This book is intended to cover the third and fourth years of a rural biology course, and will also be extremely useful as a fifth year text to cover CSE and GCE Courses. It is assumed that the pupils have undertaken a basic course in general science during the first two years. The book emphasises the underlying scientific principles of living things to be found in the school garden, and the experimental approach is used to build up a sound knowledge of biology and develop scientific method.

The book is handsomely produced and profusely illustrated. 15s

CHEMISTRY TAKES SHAPE A. H. Johnstone

and T. I. Morrison

This course exemplifies a radical and exciting approach to chemistry. Although primarily designed to cover the Scottish 'O' Grade syllabus, the course has been proved a useful introduction to any elementary treatment of chemistry within a wide range of academic ability.

'An excellent introduction to chemistry ... This book can be recommended for use in any secondary school.'—*Technical Education*

Book One 6s 6d; looseleaf 5s 6d Book One Teachers Guide 9s 6d; looseleaf 9s Book Two 7s; looseleaf 6s Book Two Teachers Guide 10s 6d looseleaf 9s Book Three 12s 6d

HEINEMANN 48 CHARLES STREET · LONDON WI

EDITORIAL BOARD

MICHAEL ARMSTRONG

Nuffield Foundation Enquiry Group

- Edward Blishen
- F. C. A. CAMMAERTS Professor of Education, University College, Nairobi, Kenya
- R. S. FISHER Senior History Master, Woodberry Down School, London
- G. C. FREELAND Headmaster, Mowmacre Junior School, Leicester
- E. HARVEY Headmaster, Weston Lane County Junior School, Otley, Yorkshire
- B. F. HOBBY Second Master, Yardley Grammar School, Birmingham
- H. RAYMOND KING Ex-Headmaster, Wandsworth School, London
- ERIC LINFIELD Senior Lecturer, Newton Park College of Education, Bath
- PETER MAUGER Headmaster, Nightingale County Secondary School, London Borough of Redbridge
- J. H. TURNER Director of Education, West Bromwich
- J. WALTON Headmaster, Beaminster School, Dorset
- Editor: BRIAN SIMON School of Education, University of Leicester
- Assistant Editor: NANETTE WHITBREAD City of Leicester College of Education
- Reviews Editor: GEOFFREY RICHARDSON Education Department, University of Hull
- Editorial Communications. MSS and contributions to discussion (800 words maximum) should be addressed to the Editor, 71 Clarendon Park Road, Leicester. Books for review should be sent to G. Richardson, 173 Cottingham Road, Hull.
- Business Information. FORUM is published three times a year, in September, January and May. Three Shillings and Sixpence per issue (3s. 9d. post free). Postal subscription Ten Shilkings yearly. Correspondence relating to subscriptions, etc., should be addressed to the Manager, 86 Headland Road, Leicester. Tel. Leicester 37348.

Published by PSW (Educational) Publications, 71 Clarendon Park Road, Leicester.

10/65 and Non-Streaming

Although July 12th was the supposed deadline by which Authorities were to have produced their interim and long term plans for comprehensive secondary reorganisation in accordance with Circular 10/65, it appeared that the Secretary of State was unwilling to make any immediate move. Only 69 of the 165 authorities met the deadline with plans for their whole area-and these included the notorious Doncaster Plan and some very mixed schemes. On the other hand, only 10 had flatly refused or were playing around with schemes that utterly negate the comprehensive concept. These included Surrey with proposals to retain all 19 grammar and 2 R.C. aided grammar schools, leaving the selection plus late transfer principle unchallenged; Bournemouth with its 11-plus quota system; and Richmond with its retrogressive scheme for even narrower selection at 11. Of the 86 whose plans were still in the discussion stages, some 16 had been officially granted an extension and a further 22 were asking for more time. A few more have now submitted plans and the rest may be expected later in the autumn. It is probable that these will also include some half-hearted schemes which merely toy with the mechanics of comprehension, apply to only a small part of their respective areas, or are patently evasive.

Confusion was already apparent in the Circular's six schemes, two of which involved some form of selection. This was recognised by the N.U.T. Conference in April which effectively condemned Schemes (iii) and (iv).

Such confusion stems from failure to understand, or refusal to accept, the full meaning and purpose of a comprehensive system of education. In July Mr. Crosland spoke of 'the irresistible educational and social arguments for extending childrens opportunities for so long as possible.' Given the social structure, environmental influences and economic pressures at present prevailing in this country, 'guided parental choice'—whether at 11, 13 or 14—will not provide this full extension of opportunity. Hence schemes involving any advance option for, for instance, five- or seven-year courses in separate schools are not genuinely comprehensive. Similarly, schemes which include sixth form or junior colleges may or may not be comprehensive depending on whether entrance to these is open or is restricted by previous attainment as measured by examination, and on whether they offer the full range of technical and academic courses or only those of the traditional grammar school type. This opens up the question of the role of some existing colleges of further education in patterns of comprehensive secondary reorganisation.

And, of course, no area plan can be fully comprehensive in the sense of really opening up opportunity unless local Independent and Direct Grant schools are included in it. For this it would seem that a new Education Act will be needed.

Whether reorganisation is genuinely comprehensive or not does not in itself depend on whether it provides for all-through, two- or threetier systems, but on whether the route through is open.

This route can be just as effectively closed by rigid streaming in so-called all-through comprehensive schools as by disguised or overt selection for transfer to the next tier.

It is in this context that the June conference held by FORUM and the Comprehensive Schools Committee assumes such significance, as the report in this issue reveals. Speakers from platform and floor consistently argued, with strong supporting evidence from direct experience, that it is only in a non-streamed comprehensive school that the maximum extension of children's educational opportunities becomes possible. This is not merely a mechanical matter. It is that such a structure releases teachers (and pupils) from preconceived and restrictive notions about the potentialities of the children in the class, and challenges them to devise dynamic approaches that can provide for new learning situations.

The pattern of reorganisation is thus only the beginning in providing for a genuinely comprehensive system of education.

Non-Streaming in Comprehensive Schools

CONFERENCE REPORT by RAY PINDER

Mrs. Pinder is a London teacher who has taught throughout the primary and secondary ranges. She has been a Housemistress in two comprehensive schools, and is now taking an infant reception class.

On a warm Saturday morning, June 4th, 1966, some 400 teachers began assembling at the London Institute of Education for a full day conference jointly organised by FORUM and the Comprehensive Schools Committee. They came from as far afield as the Isle of Man, Yorkshire and Devon; and for some days late applicants had been told there would be no room.

The morning session was planned to focus on the organisation of a non-streamed comprehensive school, and the afternoon on the teaching situation.

The educational needs of the child and the search to find new methods to provide maximum educational opportunities for each child dominated this Conference.

Dr. Raymond King, formerly Headmaster of Wandsworth Comprehensive School, put these problems before us in his opening remarks. He stressed the need for learning situations appropriate to varying abilities in which talents of many kinds may be discovered and nourished.

The case for non-streaming at the primary stage was very convincing on all grounds, said Dr. King, and there was a movement at large in the country away from rigid streaming and a curricular trend away from a prescribed ground to be covered by instruction. Instead we had moved towards a series of enquiries and relevant thematic studies cooperatively undertaken. Inter-Disciplinary Enquiry, projects, team teaching, language laboratories and other developments including individual assignment work made non-streaming pertinent.

This view was certainly reinforced as speaker after speaker from platform and floor gave their experiences of unstreamed classes. They spoke with enthusiasm and gave abundant detail of the various ways in which their schools had met the unstreamed situation and all its demands.

First stages in unstreaming

Mr. Graham Hammond, Head of the English Department at Beaminster School in Dorset, described the first stages in unstreaming the school in September 1965, beginning with the first year intake. But while the school was being unstreamed, no department had been forced to unstream and, in fact, the History and French departments had preferred their classes to be 'setted'. The traditional time-table of eight 40 minute periods or 'sells' was being rearranged into four double periods to give more flexibility and be more useful for team teaching.

The staff had needed to re-orientate themselves: one of the problems found was the lack of a fund of experience of non-streaming. Mr. Hammond also considered that not enough attention had been given to the new methods needed, although organisational forms had had considerable publicity. He believed that class teaching was inadequate in the non-streamed situation, and pointed out that even new methods were still being based on subject divisions.

Non-streaming not cheap

Nor was the work easy; the provision of the kind of material necessary could be a strain. Above all, non-streaming was not cheap: money was needed for equipment.

One great achievement of non-streaming, said Mr. Hammond, had been to end the process of 'noneducation by humiliation'. Traditional tests, examinations and class positions were irrelevant to the non-streamed situation; but new ways of evaluating the work were needed.

Reporting to parents was most important. Visits had been made to all twelve of the contributing primary schools to explain to parents what was being done at this school. Another important question for the future was whether part-time, nonspecialist teachers would be up to the needs of the new situation. Staffing was a crucial problem.

Miss Hoyles, Headmistress of a London comprehensive, Vauxhall Manor School for Girls, had had long experience of the unstreamed situation in her previous secondary modern before coming to Vauxhall Manor which was then already non-streamed. This school had now been unstreamed for nine years—newcomers were arranged in classes according to their dates of birth. There was a common curriculum for the first three years yet both 'O' level and C.S.E. were taken in the fifth year. There were no formal school examinations or prizes instead careful attention was given to observing and assessing each pupil's progress. The school was divided into upper and lower sections as it was in two separate buildings. The lower school, comprising first to third year pupils, was small enough not to be confusing to the newcomers, while teachers quickly became known to the pupils. Contact between juniors and seniors was arranged through first and second year visits to the upper school once or twice a term for school functions, while the third year spent one day a week there. Because of this arrangement a more permissive atmosphere prevailed in the upper school, and the prefect system had been abolished. Here was the social corollary to the unstreamed classroom situation. The pupils had more personal freedom but greater personal responsibility.

Pupils co-operate

Miss Hoyles, being opposed to an authoritarian approach and punishment threats, emphasised instead a relaxed atmosphere and encouragement of high standards. Experimental work in the future would be based on stable organisation and the reliability and co-operation of pupils. The prime purpose of a school must be educational. Physical essentials were adequate provision of books and educational aids, together with places for pupils to do private study and use the aids.

If adequate help were to be given to pupils then more staff, highly qualified and of excellent calibre, would be needed. But this was the ideal and Miss Hoyles suggested that in the meantime we must make use of alternative help. The day of the School Counsellor was coming, she said, and they could be very valuable. Auxiliary helpers who undertook playground and dinner supervision, marked registers, looked after stock, carried out uniform checks and even did routine marking would free the teacher to be tutor and guide.

Finally, Miss Hoyles contrasted the situation which often existed in streamed schools: there were frequent arguments as to which subject should provide the basis for the streaming, English or Mathematics. Non-streamed schools were educational establishments and must be defended in these terms rather than on social or psychological grounds. Human beings suffered from the streamed situation: it was only the non-streamed school which operated fully in favour of its pupils.

'Don't wait for changes in philosophy', advised Mr. Michael Tucker, Headmaster of Settle School, West Riding. He suggested that unstreaming was not as difficult and complicated as many supposed. One should press ahead with it and not worry too much about the objectors to the change. His hypothesis that some teachers did as much harm in streamed classes as they might do in unstreamed ones raised laughter in the conference. Mr. Tucker's main concern was the happiness of the child. He wanted children of different backgrounds to find out about each other at school. He had observed in the past, in schools which streamed, how as the forms were called out the 'A' classes in their smart uniforms gradually gave way to less groomed groups, ending with the lowest stream comprising the smallest children with more spots, squints and disabilities than the other children and often dressed in what he could only call 'jumblesale' clothing. It was not the job of the school, he said, to reinforce social divisions by segregating children.

He emphasised the careful attention which nonreaders required if they were not to be lost in an unstreamed class.

In his own school they had succeeded in teaching them the mechanics of reading without organising a segregated Remedial Department, but by withdrawing them from certain lessons on staff recommendations for remedial coaching.

In the discussion which followed the conference heard from Mr. Peter Brown, Deputy Headmaster of Henbury School, Bristol, about an experiment in team teaching. He had been delighted by the enthusiasm of staff and pupils although exasperated at the demands made upon him as a time-tabler. He suggested that in view of the great demands these new methods made upon staff, time and money, Institutes of Education might assist in producing materials; students in training could be useful in schools as junior members of teaching teams, and members of Institute staffs might then help in coordinating the work being done.

Answering an attack from the floor on Colleges of Education that are not preparing new teachers for non-streamed teaching, Dr. Kay of Redlands College, Bristol, described the methods used there to train teachers who would emerge with successful experience of small groups and therefore be more likely to tackle with success less formal teaching in full classes later on.

Examination standards

Questions from the floor about the effects of nonstreaming on examination work were answered by Miss Hoyles who said that a non-streamed school did not mean lower standards. In Vauxhall Manor 66% of the girls took 'O' level. Last year they had gained five University places and eight College of Education places, all of the pupils' first choice.

The whole position of G.C.E. was questioned by speakers. The headmaster of Thomas Bennett School, Crawley, doubted whether unstreaming could get off the ground while G.C.E. 'O' level existed, and finished by calling for a campaign against this examination. A speaker from A.C.E. suggested that teachers were hiding behind G.C.E. and not taking advantage of C.S.E. Mode 3 because they did not want the freedom it offered.

Mrs. Pole, a retired grammar school teacher and a school governor, said she had been horrified to hear of 52% failures in mathematics after a five year course. She believed that more intelligent children would emerge from non-streamed comprehensive schools.

Mrs. Winston Jones of Crawley raised the question of backward children fitting into the nonstreamed situation. Unlike Mr. Tucker she felt it was necessary to have a separate department in which the children could achieve success.

Mr. Michael Armstrong, Research Officer of the Institute of Community Studies and Chairman of the afternoon session, introduced three teachers to the Conference, each of whom had experience in teaching unstreamed classes. Mr. Derek Roberts was Head of Geography at the David Lister Comprehensive School in Hull.

Mr. Roberts had spent 14 years teaching in grammar schools when he decided to move to a comprehensive school. He described his innocence in a most humorous way saying that when, at his interview, the Headmaster mentioned that the school was unstreamed, this had seemed of no significance to him !

New methods needed

He had been used to rigid streaming in grammar school where any child unable to maintain the pace in his form would be demoted. The boy was wrong and never the teacher who set the pace. He had gone to David Lister School with his tried and proved syllabus and methods, and attempted class teaching with unstreamed classes. He soon found that merely slowing down the pace did not meet the needs of the situation. He diagnosed three problems:

- 1. To extend the ablest, bring on the average and encourage the less able.
- 2. To compensate for lack of background. (While most grammar school pupils had visited other countries, climbed mountains, seen towns other than their own home, the socially deprived children rarely left their home environment and had little direct experience to draw on in geography.)
- 3. Children who had no familiarity with books: to them, books were dead things which signalled the end of their participation in a lesson.

He was therefore forced to develop new methods which were more flexible and were concerned above all, with 'bombarding' the children with vivid impressions. He and his staff worked as a team of five in which individual teachers were able to decide their own contribution. They made full use of local advantages; visits played an important part in giving the children direct experience. Films and slides (some made by himself and his staff) were used frequently in conjunction with question sheets. Tape recordings were used for commentaries on slides—Mr. Roberts' demonstration of some of these delighted conference.

Mr. Roberts said that all the children did valuable work when involved in this way. The less able did useful recording work with the aid of gap sentences, while the more able went on, after the completion of this task, to further individual work. On some tasks they worked in groups with the less able who learned from them. The most advanced children were doing work which was at least as good as the best work in the grammar school. He would not, he said, go back to teach in a selective school. Teaching unstreamed classes in a comprehensive school was both rewarding and practicable.

Mr. Donald Reid, Head of the Biology Department at the Thomas Bennett School in Crawley, told the conference that because of local conditions the staff there had been under pressure to prove the school academically and emphasis had been on good examination results. Unstreaming had not been deliberately introduced but had crept up on them by dint of the choice exercised by pupils in comprehensive schools. In his own department he found a cross section of the pupils and, without altering his teaching methods, found that streaming or non-streaming was quite irrelevant to G.C.E. Biology for which 'recall' was of first importance. He gave figures to back up his contention that there was no significant variation in G.C.E. 'O' level results in Biology between the streamed and unstreamed groups. Mr. Reid implied that the quality of the teaching was more important. He had begun to wonder how many more subjects could be taught to unstreamed classes without radical revision of method. Mr. Reid was in a minority here since most speakers, from platform and floor, emphasised the need for a new approach to teaching methods for non-streamed classes.

A unified course

Miss Allsopp of Vauxhall Manor School was a member of the English Department in her fourth year of teaching; all her experience had been with unstreamed classes. She said that the chief emphasis at her school was on communication and contemporary life, matters relevant to children. There was a unified course of work rather than a multiplicity of subjects. Unstreaming had forced all the departments to look at the needs of the children. In the English department they would take a class experience—a film, broadcast or book—as a starting point. From this would develop class discussion on a theme which sometimes led to group or individual work. A constant change of approach and flexible organisation meant that children with different abilities were called on at different stages. The child who was shy of class discussion could nevertheless put all her ideas into written work, while the child who spoke freely but could not get it down on paper made a different contribution. The theme might last for one or two weeks: this relieved the strain on the slower workers who were thereby given enough time to finish their work while the faster pupils undertook a variety of tasks.

The school spent the second half of each Spring Term on a project in which teachers of other subjects co-operated. In 1965 the topic had been the Middle East. Staff discussions began the previous term when books and material were collected. These were circulated among the children. Each child kept all her project work in one file and these files were displayed at the end of the term. There were continuous exhibitions during the seven weeks of the project; a workshop atmosphere developed in the classroom as enthusiasm grew among staff and pupils. In 1966 they had chosen London for their project because they felt that the Middle East lent itself to a rather superficial and glamorous treatment, whereas London was closer to the children's lives. Visits were undertaken as part of the project. It was quite clear from all Miss Allsopp said that the project related to the various parts of the school curriculum which were drawn together and that the work was enjoyed by all concerned.

In the questions which followed, Mr. Roberts was asked whether there were any parallel developments in other departments of David Lister School. He replied that similar approaches were used in History, that English was taught in terms of the child's own experience and that mathematics was the only subject for which setting was arranged. The head of the history department of the school then spoke briefly from the floor. He too used tape recordings of contemporary accounts such as the Anglo Saxon Chronicles and Beowulf. One theme in History had been 'Ways of preserving the past' and had been concerned with many topics.

Other speakers followed who gave examples of the ways in which children in non-streamed classes worked together. One biology teacher had found that the more academic children tended to look for the answers in books, while the less academic would find out for themselves by observing the creature concerned, counting its antennae, and so on. There was room, she said, for both approaches within the class so that there was mutual extension of experience.

Mr. Robertson, Head of English at Abbey Wood, London, said that when he had first gone there he walked into a low-streamed class to be told, 'We're the nuts!' Unstreaming had started on an experimental basis and he had been told by the children that they enjoyed working in a group, for the group, whereas in an academic set each child worked only for himself. Children enjoyed helping each other and friendship groups developed. Later he cut across these and imposed groupings which would not have developed naturally, but he always explained this to the children who accepted it with goodwill and still worked well together. This was, in itself, a good discipline. One advantage he had found was that children from homes where books were rare began to read more.

Individual mathematics

Miss Herbert, herself a mathematics teacher, questioned why 'setting' should be required in her subject, since it was one in which each child must work at an individual pace and she felt this should not require 'setting'. She was supported by another mathematics teacher who suggested that maths was an ideal subject for programmed learning through which each child could pursue an individual course of work, eliminating the need for 'setting'.

Marking and the need for new methods of assessment were topics raised by questioners from the floor. At Vauxhall Manor, said Miss Allsopp, marks were not put into the children's books. Careful comments were written discussing the work done. Teachers kept their own record, based on the fivepoint scale, together with a subjective merit mark. Another teacher with unstreamed experience had found that the organisation of work on an individual and group basis gave time for marking to be done in class, with the child. Often a group of children would gather and the work and a suitable assessment were discussed.

The last session of the Conference was addressed by Professor Brian Simon, the editor of FORUM. Mr. David Grugeon of the Comprehensive Schools Committee took the chair.

In overcoming streaming in the comprehensive school, said Professor Simon, we were for the first time approaching a point where everyone will be seen to be educable. This opens up an entirely new situation which raises basic problems of method, the content of education and the ethos of the school.

As regards the teaching of unstreamed classes at the secondary stage, more attention should be paid to the experience of the primary schools. The new methodology in, for instance, mathematics and science in the primary schools had lessons for the secondary stage also. A good deal of attention was now being given to the psychology of learning among young children and this involved new approaches in method very relevant to the nonstreamed situation.

The move towards non-streaming forced a rethinking of the whole approach to education, including the use of group work and team teaching. Professor Simon gave the example of a nonstreamed first year class in science he had observed at a Leicester high school. There had been no class teaching, yet each child was occupied. Apparatus had been set up round the laboratory involving different experiments which the children carried through systematically in groups. This approach would develop initiative, curiosity and involved a kind of self-programming.

Non-streaming involved a new philosophic approach. People only became convinced about non-streaming by seeing it in operation, trying it themselves and re-thinking their practice at a deeper level.

In science, enquiry, discovery and group work called for new methods. Each subject had its logic which required some degree of systemisation; while he was sympathetic to the theme approach involved in inter-disciplinary studies, it was important to find the way both to preserve the logical development of the subject and to allow for the flexibility and scope for individual initiative characteristic of the theme approach. Non-streaming in the comprehensive school led inevitably to a fundamental rethinking of the content of education.

Professor Simon then turned to the C.S.E. and G.C.E. examinations. Serious discussions were needed, he said, about the relation between the two examinations, but we should not take a fatalistic view of G.C.E. The content of this examination can be changed and more teacher control gained. This was a transitional phase in which we could gain experience of the C.S.E., see how it developed, and press for G.C.E. reforms.

Future study proposals

With regard to the future there was a need for strenuous discussion and exchange of experience among those concerned with non-streaming. Many unstreamed schools worked in complete isolation —such a school might be the only one for miles around. FORUM saw its job as to reflect what was going on in the most advanced schools, and, to assist the movement for unstreaming and communication between educationists concerned, he proposed the following:

1. FORUM would publish material on teaching in non-streamed schools, in the form of short articles.

- 2. Local people involved in non-streaming would be put in touch with each other. The Comprehensive Schools Committee and FORUM would encourage the formation of local groups for discussions. It seemed likely that certain Institutes of Education would be prepared to give facilities for such discussions and possibly arrange one-day or longer conferences. Regional conferences might also be held.
- 3. Those concerned with non-streaming should consider how to build evaluation techniques into the new methods and approaches being tried out. There was a great need for research of this kind.

Conference then heard from two sociologists in the discussion which followed. Mr. Holly of Birmingham felt that examination passes were of interest to employers and parents and was interested in the effects of non-streaming here. He also felt that nonstreaming involved 'red-hot' social problems.

Mr. Nicholas Waite was conducting research into comprehensives and believed that unstreaming would break down social barriers at school and lead children from deprived backgrounds to expect this situation to continue after school. Their eventual disappointment woud lead them to delinquent behaviour. Improved behaviour at school would only postpone the day of reckoning and he feared that non-streamed comprehensives would be dominated by the apathetic and hostile elements, not normally found in grammar schools. Judging by comment in the hall, there was little support from teachers present for Mr. Waite's contention.

An exchange teacher from the United States told Conference that he had been exposed to streaming in Britain and he did not like it. Mr. Packer from a Leicestershire High School had found the integrated day, with project work, a great success. He was trying to break out of the classroom and his pupils might work at the County Library, 200 yards down the road, the School library or in the classroom. Often there were only about ten pupils in the classroom at any one time. A project they had undertaken involved history, geography and scientific method. His own subject was English and he found this had its part in everything else that was done.

There were some final questions on the extent of streaming or non-streaming desirable. Should nonstreaming stop short in the fifth and sixth years? Was a certain amount of streaming necessary to get the best out of the very ablest and the retarded?

In closing the Conference, Professor Simon dealt with the questions raised by the sociologists. He said that he felt Mr. Waite's sociology was somewhat metaphysical. He had implied that since we lived in a class divided society these divisions should be reflected in the schools, to make everyone accept such social divisions. But unstreaming was basically an educational issue. This did not mean it had no relation with society but that it was necessary for educational advance. Sections of the school population were deprived of the experience necessary to develop full personalities and the function of the schools was to understand and overcome these deprivations and assist children to participate as much as possible in their cultural heritage. Comprehensive schools and non-streaming were no panacea but gave a situation where greater educational advance could take place. Non-streaming was limited by the demands of examinations, and rethinking was needed about the demands which the universities made which forced a particular structure at the top end of the school.

The Comprehensive Schools Committee have produced an edited transcript of the talks and discussion throughout the Conference. This was put together from tape recordings and two sets of shorthand notes. The transcript is available, price 10/- post free, from Mrs. Valerie Packham, C.S.C. Secretary, 209 Belsize Road, London, N.W.6.

Planning to Afford Education

JOHN VAIZEY

John Vaizey was for a number of years in charge of the Economics Research Unit at London University Institute of Education, and has written several books on the economics of education. At present a Fellow of Worcester College, Oxford, he will shortly be taking up his appointment as Professor of Education at Brunel University.

It may perhaps be forgiven the present author if he recollects that the present 'crisis'—if that is what it is—in the finance of the education service has long been predicted by him. In the mid-sixties it seems inevitable that the rate of growth of the education service should be such that the annual increment in the rates should be of the order of 1/-; perhaps less, if the rate of increase of prices and incomes is controlled more successfully than it has been.

The reasons for this are well-known, and have been spelled out most recently by Knight and Vaizey in W. Beckerman *The British Economy in* 1975.* Postulating there a growth rate somewhat similar to that in the National Plan, Beckerman (one of the Plan's principal authors) makes calculations of likely outlays, given present and foreseeable programmes, on the whole range of national output. Education has more carefully drawn plans than many sectors of the economy, and its rate of change is hard to affect in the short-run because of inelasticities in the supply of teachers, so that it is relatively easy to forecast the orders of magnitude of outlays in the 1970's, on a constant-price basis.

In 1960, in the United Kingdom, outlays by public authorities were of the order of £800m. on current account, and £140m. on capital account. By 1975, assuming the end of the teacher shortage, the substantial introduction of courses for 16s to 18s, doing far better than Robbins, providing nursery school, and so on, the current outlays would be

*C.U.P., 1965, 80/-.

£1,593m., and capital outlays about £280m. (Beckerman, pp. 494-6), all at 1960 prices.

But, of course, prices rose from 1960 to 1966, and will rise further by 1975. It would, perhaps, not be unreasonable to double the 1975 estimates just given to get an idea of what 1975 prices could be, if the current prices and incomes policy were to fail. This would not affect the main *economic* point of the Beckerman book, that with an annual growth rate of around 3.5%, there is no problem in achieving the educational targets that reformers have set. Indeed, experience from 1945 to 1965, when the growth rate was on average lower, has confirmed this. There has been substantial progress in education, masked, it is true, by the growth of population, but still striking.

Outlays of the order envisaged above should enable any amount of building for comprehensives to be undertaken. Specifically the Beckerman estimates for the plan period 1970-1975 imply a building rate of 700,000 places a year (an average of 560,000 places over the period 1960-1975); and an outlay on higher education of £100m. a year, or 25% bigger than Robbins. The Beckerman estimates also imply a teaching force in the schools (for England and Wales-all other figures are for the United Kingdom) of 528,000, compared with 322,000 in 1960. This figure is higher than that given in the recent National Advisory Council Report, whose mini-minority report advocating higher targets both of the economists on the Council-Professor Carter and myself-signed.

Provided, then, that we get the growth, by the 70s there should not be much trouble in getting the resources into education on a scale to provide an adequate secondary education system. Specifically, we say (p. 477) 'that while in 1960 there were 0.5m. pupils aged 15 and over in England and Wales, by 1975 [on our assumptions] there will be 1.4m., of which only 0.2m. will be accounted for by the raising of the school-leaving age [to 16].' With class sizes of twenty, the number of teachers in secondary schools would rise from 166,600 in 1960 to 278,000 in 1975 (p. 483).

To reach these targets, we argued explicitly that administrative drive and secondary reorganisation were necessary. Basic to the projection, however, is the growth rate. If we do not get the growth, then something will have to give, and as we saw in the Maudling crisis and its aftermath, that includes education.

The financial problem is different. Here the problem is that rateable values rise slowly, while local authority money outlays rise fast—combining both the *real* rise in outlays, and the *price* rise. Suppose rateable values remain the same between 1960 and 1975. Suppose, further, that the share of rate outlays in total outlays on education did not change. If, then, the education rate were 5/- in the £ in 1960, assuming a price rise of 100%, by 1975 the rates for education would be nearly 20/- in the £.

A corresponding increase would take place in other services, so rates could easily quadruple as a whole. There are three mitigating factors. First, rateable values go up periodically, and new building takes place to add to the total. Next, the central government periodically increases its share of local outlays. And, thirdly, even though the rate in the pound goes up, incomes go up too, so that, on average, the situation does not worsen, though it does for important groups, of course. Everybody is agreed that the rating system must go. To replace it, we shallin my opinion-need fewer and larger authorities. with power to levy local income and excise taxes. In the interim, it would be folly to allow education to be cut because it happens to be partly financed in this mad way.

Lastly, the editor asked me to write about the 'benefits' derived from education. Some economists have convinced themselves that these can be measured. I do not think that they have proved their case, and I see no point in propagating their errors, which Dr. Balogh and Mr. Kaldor, as well as myself, have deplored. All that can be said is that Britain is a very rich country that can afford to educate itself; that we are not seeking to do more in 1980 than California did in 1960; and that evidence tends to suggest that there is a correlation between education and wealth, in a causal direction —that education develops attitudes conducive to efficient production.

The Schools Council at Work

The Schools Council has been prolific in its activities, particularly during the past year, as the fastgrowing volume of published bulletins, working papers and reports testifies. It has concerned itself with a widening range of the curricula from primary mathematics, through young leavers' courses and C.S.E. to the sixth form. While it constantly disclaims any intention of acting as a coercive or centralising force, its undoubtedly close association with the DES inevitably leads to some speculation on this score.

Then there has been the conflict over the use of 'aptitude' tests for monitoring C.S.E. — waged largely between the N.U.T. and the appropriate committee of the Schools Council over the past 18 months — in which fundamental educational concepts were clearly involved.

FORUM has often urged the need for more research in teaching methods, curricula, modes of assessment and all that may maximise the whole process of education. Lack of communication about new developments and experiments has long been a weakness in our educational system. If the Schools Council could be a medium for remedying some of these deficiencies it might further a real break-through in educational progress. So far it has seemed wary of controversial issues.

In recent months there have been changes among the leading personalities at Belgrave Square. The duumvirate became a triumvirate, but the two original joint secretaries, Messrs. Morrell and Morris, have left, the former being replaced by Mr. Caston. Alan Bullock will succeed Sir John Maud as chairman in October. Such moves may or may not foreshadow changes in policies, but must make some impact.

The Editorial Board therefore decided that it was time to examine the structure and work of this constitutionally ambiguous institution. The following articles do this from several angles.

Introducing the Schools Council

JOHN F. KERR

Professor J. F. Kerr of the School of Education, University of Leicester, is responsible for in-service courses for local teachers.

Educational innovation usually starts in the classroom. It was to encourage the growth of new ideas about what to teach and how to teach through communication between practising teachers that 'The Schools Council for the Curriculum and Examinations' came into being on 1st October, 1964. The Council is also concerned to develop a view that examinations and curriculum developments are necessarily inter-related. The schools cannot be free to innovate new teaching methods and to adapt old courses unless the examining process is modified in response to the changing objectives which teachers set for their pupils. Since the Schools Council took over the co-ordinating functions of the Secondary School Examinations Council, it is in a position to influence the means by which educational attainment is assessed. The surveys and reviews of the Council's work which are dealt with in this issue of FORUM are evidence of the remarkable momentum and influence which has been built up after only two years' work.

An organisation to stimulate and co-ordinate curriculum changes started in 1962 when the Ministry of Education established a Curriculum Study Group at Curzon Street. The formation of the Group aroused suspicions of a return in some measure to more central control. Since the start of publicly provided education in this country, teachers have worked hard to earn their freedom to make their own decisions about curriculum and teaching methods. They were naturally sensitive to any signs of a return to the days when conformity to the manual was enforced by rigid inspection. This suspicion no doubt hastened the appointment of a Working Party* in July 1963 to consider how machinery might be provided to ensure co-operation between all the branches of the education service. A year later the necessary steps were taken to establish the Schools Council. The original Curriculum Study Group became part of the new Council which seems to have been accepted-as Sir John Maud, the Chairman, said in the report of the first year's work, Change and Response-as a kind

* Report of the Working Party on the Schools' Curricula and Examinations (Lockwood Report), H.M.S.O., 1964. of Parliament of Education but with 'no right or wish to lay dawn laws on anything'. The reconciliation of freedom and control in the whole educational process demands the sort of co-operative approach which the setting up of the Schools Council made possible.

The Council is a consortium of about sixty members, representing professional organisations of teachers from all kinds of schools and members from the universities, colleges of education, technical colleges, H.M. inspectors of schools and the local education authorities. The constitution of the Council provides that the majority of its members should be teachers. It is then an association of all those bodies concerned with taking decisions about education. It seeks to create conditions for the harmonious co-operative study of common problems without interfering with individual responsibilities. There is ample evidence that the Council has been an effective instrument for the initiation of a great deal of curriculum development work. As the range and volume of activity develops over the next few years, changes in the pattern of organisation will no doubt become necessary. Although the Schools Council is financed largely through the Department of Education, its independence was symbolised by the provision of its own headquarters at 38 Belgrave Square, London, S.W.1. The fact that many of the Council's staff of about fifty are drawn from Curzon Street and H.M. Inspectorate, usually on a basis of temporary loan, suggests a strong link with the Department but it is contended that the full-time staff must be genuinely the servants of the Council. Other members of staff are recruited by secondment for a limited period from posts in schools, colleges and universities.

Committee structure

The structure of the Schools Council is a binary form of organisation which is illustrated by the table below. The Council and five main committees comprise the Policy Organisation. The detailed work is carried out by the Executive Organisation which is headed by a Co-ordinating Committee.

Each committee has its own secretary, assistant secretary and committee clerks drawn from the fulltime staff. The committee members, who are associated with all kinds of educational organisations, are invited by the Council to assist in the work with no payment other than expenses. Although some of the research and development work is done by the Council's own staff, a great deal is carried out by teachers in the field, the universities, the local education authorities, and bodies such as the National Foundation for Educational Research. In this respect, the Council is also a commissioning agency.





A measure of the impetus which the work of the Schools Council has acquired during the two years of its existence might be deduced from the volume of published reports. About twenty documents have been issued in three main series. There are about a dozen Examination Bulletins which so far relate mainly to the Certificate of Secondary Education. This series was started by the Secondary School Examinations Council. A series of Working Papers offer suggestions for curriculum development projects in fields which the Council considers to be important. And a series of Curriculum Bulletins has been started to record developments in curricula and teaching methods.

It would not be possible to describe all the curriculum study and research with which the Council is associated but four main areas of work can be identified and examples given.

Subject Studies

A great deal of development work had been financed by the Nuffield Foundation, particularly in

science, mathematics and modern languages before the Council was established. The enthusiasm in the schools for the Nuffield-type courses, which involve a high measure of teacher participation in their construction and the fact that grant-giving foundations like Nuffield could not be expected to finance these projects indefinitely, were undoubtedly factors which led to the formation of the Council. The Nuffield model for curriculum construction was adopted by the Council for use in new subject areas. Curriculum teams of seconded teachers from all sectors of the educational field, backed by consultative committees, draft new programmes and materials which are tried out in selected schools. These courses are modified as a result of feedback from pupils and teachers, and subjected to more extensive trial before publication. These publications are not stereotyped textbooks or anything like textbooks. They consist of teachers' guides and related materials which give the teachers a range of choice for the presentation of their lessons. Building a curriculum in this way is a lengthy and expensive

process involving considerable problems of organisation and in-service training of teachers. Project English introduced through Working Paper No. 3 (H.M.S.O., 1966) is a ten-year programme of research and development concerned with the ability of children of all ages to communicate. It will involve the active participation of hundreds of teachers, thousands of children and many research workers from schools, colleges and universities. Activity in subject studies of this kind is growing so fast that it has not always been possible to evaluate the degree to which the claims made for the new approaches are being achieved. Steps are now being taken to devise appropriate techniques of evaluation but the problems of measuring some of the outcomes of the new courses and teaching methods raise difficulties which are proving somewhat complicated.

Major Curriculum Studies

At its first meeting the Council decided to initiate major studies in preparation for the raising of the school leaving age (Working Paper No. 2, H.M.S.O., 1965) and to enquire into the pattern of sixth form curricula and examinations (Working Paper No. 5, H.M.S.O., 1966). Both these programmes of development and research are designed to help the schools to cope with change—in the first place to the coming challenge of the five-year course of secondary education and secondly, to suggest ways in which sixth form work might become more flexible to meet contemporary needs.

In both subject studies and the broader-based curriculum studies, the need has grown up for locally organised centres where teachers involved in the development work can meet regularly for discussion and to experiment with new apparatus and audio-visual materials. The Council has encouraged the setting up of teachers' centres for these purposes, indeed it has been a condition of participation in the trials of the joint Nuffield/Council primary mathematics and science materials that local education authorities should provide such centres.

Examinations

This area of the Council's responsibility was taken over from the Secondary School Examinations Council and a noticeable change of policy is manifest in the series of published *Examination Bulletins*. An attempt is being made to make examinations much less a major determinant of the curriculum and teaching methods, but rather to create conditions whereby examinations follow innovation and experiment in the schools. This policy is particularly evident in the C.S.E. examinations in which individual schools can undertake responsibility for grading their own students, subject to a moderating procedure which will enable the schools to relate their own gradings to the national scale of assessment. In the 1965 examinations, the use of a national attainment scale to monitor the relative standards of schools created some controversy between the National Union of Teachers' representatives and the rest of the Council. Even before the publication of a full report on the test, the debate about a national test to equalise standards was heated and remains a controversial issue.

Research

Although the Schools Council is concerned principally with curriculum development work, it requires the support of research, particularly in the fields of examinations and curriculum evaluation. Its own programme of sponsored research is so far fairly limited and confined to problems of immediate relevance to the rest of the Council's programme. Much more research work of interest to the Council is farmed out to universities and bodies like the National Foundation for Educational Research by the Department of Education and Science.

The future possibilities for this dynamic movement in curriculum development are enormous for the schools but there are questions which need immediate attention. The cost of this kind of work is already growing rapidly. The initial figure of £100,000 per annum for the preliminary work could well rise to £1m per annum. The education service has relied heavily during recent years on the generosity of the Trustees of the Nuffield Foundation but this dependence is unlikely to continue indefinitely. It is to be hoped that the movement will not flounder for lack of financial provision. As the range and volume of development grows during the next few years, there will be a need for much more associated in-service training. This situation has already arisen with the Nuffield projects in the O-level sciences, materials for which are now being published. The Council has taken the lead in the arrangement of courses for re-training the teachers but some organised decentralisation is clearly going to be necessary. A pattern of co-operation between local authorities and other agencies involved in inservice training must be worked out. Another question relates to the prestige of the new teaching materials. The Council has never claimed that it has a master plan for the curriculum based on some general theory. On the contrary, in the absence of such a theory, it has worked in a more pragmatic way. But because of the prestige of the new courses. although no one is telling the teachers they should use them, there is a danger of uncritical acceptance. This could lead to a misunderstanding that the new courses are being imposed on the schools.

The Schools Council Publications

The School Council's 'Examinations and Curriculum Bulletins' describe experiments and new developments in examinations, school curricula and teaching methods. Its 'Working Paper' series is designed to stimulate further thinking and experiment in fields of major educational and social concern. The Council also issues occasional individual reports. Titles include: Experimental Examinations: Music 6s. 6d. (7s. 4d.); Mathematics in Primary Schools 10s. (10s. 11d.); Science in the Sixth Form 4s. 6d. (5s.).

Trends in Education

This new quarterly journal provides a new means of communication within the education service and between the service and its users. There are regular research features, short articles interpreting statistics, and reports on what is going on overseas. Various aspects of classroom practice are also dealt with including the role of audiovisual aids. The fourth issue, to be published in October, looks at the case for world history; religious instruction; teamwork in careers guidance; education in Russia. 'The new journal will be of immense value to members of education committees as well as to teachers and the general public . . .' Sir William Alexander in EDUCATION. 3s. 6d. (4s.) per issue; annual subscription 16s. including postage.

Project

The scope and variety of the engineer's work will increase in the coming years, with the growth of scientific knowledge, and the qualified engineer will count more and more in our daily lives. This new illustrated magazine, describing many aspects of engineering and the varied career opportunities it provides, is intended mainly for young people in science fifth and sixth forms.

Issued three times yearly-annual subscription 15s. including postage.

Education in 1965

The latest annual report of the Department of Education and Science describes a year in which progress and change in the educational field-in teacher supply, in secondary education, in further and higher education-gained further momentum. 9s. 6d. (10s. 1d.)

Reference Pamphlets

Many of these handbooks, prepared by the Central Office of Information, give a brief and comprehensive picture of one aspect of the British way of life. Others deal with Commonwealth countries. Each is invaluable as an introduction to the subject concerned and for providing information about further study. Titles include: No. 33 The British Parliament **3s. 6d.** (3s. 11d.). No. 49 The English Legal System **3s. 6d.** (4s.).

No. 55 Promotion of the Sciences in the Commonwealth 6s. 6d. (7s. 1d.).

Study Abroad, Vol. XVI

The latest edition of this famous UNESCO handbook gives full details of over 170,000 individual opportunities for subsidised study and educational travel offered by organisations and institutions. They present possibilities of travel to virtually every country in the world, and for study of almost every academic subject during 1966, 1967 and 1968. 20s. (23s.).

Prices in brackets include postage

Free lists of titles (state subject/s) are available from Her Majesty's Stationery Office. P6A (FOR), Atlantic House, Holborn Viaduct, London E.C.1

50

Government publications and those of UNESCO can be purchased from the Government Bookshops in London (post orders to P.O. Box 569, S.E.1), Edinburgh, Cardiff, Belfast, Manchester, Birmingham and Bristol, or through any bookseller

Searchlight on the Schools Council

J. STUART MACLURE

J. Stuart Maclure, editor of Education, recently introduced a television series on secondary and further education for BBC-2's 'Outlook' and has compiled the only up-to-date published volume of selected, historic educational documents.

The Schools Council is one of those daunting institutions which proliferate in education. It is undoubtedly important. Its importance lies more in its potential than in anything which it has achieved up till now. It is complicated. It exists to reflect the tension between well-recognised interests, professional, administrative, political with a small p, and to use this tension creatively to release the kind of initiatives in curriculum and examinations which in the ordinary way are squashed by the deadweight of organisational inertia and pedagogic conservatism.

A glance at the organisation chart bears this out. Here is a formidable structure of committees stemming from the main body, the Schools Council itself. There are three 'Joint Secretaries' who are technically co-equal. Originally there were only two, both seconded from the Department, but a third, Mr. J. G. Owen, took up duty earlier this year from Somerset L.E.A.

Mr. Morrell's departure for the Home Office and the appointment of Mr. G. K. Caston from the D.E.S. to succeed him assumes the continuance of the triumvirate arrangement which shows every sign of working well in practice but is clearly potentially explosive. Mr. Owen's appointment is intended to associate the L.E.As with the administration of the Council and to dispel any idea that the Council is in the pocket of the Department. But the smooth working of the Council depends on the secretariat functioning as a team, not as the representatives of outside interests. This is probably obvious enough to all concerned for this clumsy procedure to be made to work perfectly well in practice, but it would be idle to pretend that the organisation structure is not highly ambiguous.

This raises an important point about the Council as a whole. The careful balancing of interests and the inclusion on the secretariat of an administrator from outside the Department is part and parcel of the elaborate constitution division in 1964 after the troubled life of the Ministry of Education's Curriculum Study Group. I remember going to a school opening in Berkshire five or six years ago when the Minister of Education, Sir David Eccles announced the creation of the Curriculum Study Group—using the analogy of the Development Group in the Architect and Buildings Branch—to do for the curriculum and the content of education what the joint efforts of architects, administrators and H.M.I.s were doing for the design of the school buildings.

Curriculum control

This quickly set the cat among the pigeons. The education authorities bridled fast. Legally—though in practice this has gone by default—control of the curriculum belongs to the L.E.A.s, who leave it to the teachers, who if they work in schools which are dominated by examinations, abide by the syllabuses they receive from outside, or else obey an inner light dimmed by received conventions.

The distaste which leading L.E.A. figures like Sir William Alexander felt for the Eccles initiative was shared by the organised body of professional opinion. The C.S.G. was to be a Departmental instrument carrying out development work and publishing the results. Teachers were to be associated with particular projects, but in personal capacities because they were good teachers (or because the H.M.I.s recommended them) rather than because they held any position in a teachers' union.

The prospect of the Certificate of Secondary Education made it necessary to do some work on examination and this fell naturally into the lap of the Curriculum Study Group. But it soon became clear that if the education service as a whole was to be associated with the business of curriculum reform, then the whole operation had to be much more broadly based. There was widespread suspicion that the Eccles initiative was part and parcel of a move towards centralisation elsewhere, and central control of the curriculum aroused plenty of spontaneous opposition.

It took several years to disentangle the C.S.G. and its approach to the reform of content and method, from the constitutional argument about the propriety of the Minister taking a hand in these matters. Successively, Sir David Eccles and Sir Edward Boyle fell foul of the teachers and the authorities over the handling of the Burnham Committee. This held up progress for many months. Finally the authorities and the teachers combined to persuade Sir Edward Boyle to create a new body, the Schools Council, as an independent institution on which the Ministry of Education was represented alongside other interests. Initially its finance came direct from the Department. But the intention from the first was that it should ultimately be largely supported by the local authorities, aided of course by general grant, using the device of pooled expenditure as a means of painlessly extracting support from every authority in proportion to size.

Hence the Schools Council's peculiar constitutional position—it is an autonomous body (though presumably the Secretary of State could wind it up any time) drawing its finance from rates as well as taxes, in which control of the curriculum development programme is vested, serviced by a secretariat largely (but not entirely) culled from Curzon Street, yet dependent on the goodwill of the vested interests of the education service.

Myths preserved

Given the way responsibility is shared in the English educational system this technique has a great deal to command it. It preserves the myths and hypocrisies which are dear to many hearts and which, oddly enough, perform important and valuable functions. The right people to preside over an outfit of this kind—which is much more concerned with altering attitudes than detailed syllabuses—are the educational politicians, who understand how committees work and, to a certain extent at least, how the world works. They are the people who can most effectively hold up the pedagogic revolutions which the Schools Council is likely to start; the best place to have them is inside the Committees and not sniping from the sidelines.

The myths are important, and they hold the key to the actual operation of the Council. Like all important myths, they are more true than false—given the kind of educational system we have, it is important to preserve the independence of the teachers and the local authorities in relation to the content of education, and to recognise institutionally, that changes, to be effective, must be carried by conviction, not direction.

The character of the Council so far owes a great deal to the attitude and personality of Derek Morrell—in his early forties, a heavily built man of an intellectual appearance and heavy hornrimmed spectacles, powerful in argument and skilful in persuasion. He recognised the importance of establishing the Council on a basis of shared responsibility and was the architect of the Council's constitution which technically is attributable to Sir John Lockwood and a committee of the Secondary Schools Examination Committee.

He describes the technique of the Schools Council as one of the constant inter action of the staff and Council. The topics have tended to define themselves. For example, the Council inherited the Certificate of Secondary Education from the S.S.E.C. and the Curriculum Study Group. Hard reality showed that a new examination needed to be studied and supervised.

The Council had to carry out the responsibility which is legally the Secretary of State's to act as the central co-ordinating authority for the new exam, and to lay down guidance for the 14 new examining bodies. This meant a period of rapid creativity including the preparation of 16 examination bulletins—succeeded in turn by a less exciting regulatory phase.

C.S.E. monitoring

In all this the staff of the Council have had the job of putting up papers defining problems and defining choices. The Council and its Committees have made the choices. For example, they have been faced with the need to put out material on monitoring standards. Here was a scholarly operation. All the possibilities went to the appropriate committee, together with a professional assessment. It was for the Committees and the Council to decide—taking into account such unscholarly considerations as 'what people will stand for'.

As an act of policy, the Council favours going forward to public discussion as early as possible as soon as the Council thinks it knows its own mind —and an essential part of the process will be to arrange conferences—for example conferences between the Council and the examining boards to help disseminate and crystallize opinions.

Other aspects of the technique of operation can be seen at a later stage in the examination sequence. The C.S.E. Committee began to see a need for an aptitude test to be used in conjunction with their monitoring procedures. This was remitted to the staff for investigation. The staff laid out the possibilities and the Council decided to get the Manchester School of Education and the N.F.E.R. to help. At the same time, they sponsored a parallel inquiry at Southampton.

Influential personalities

All this puts a great deal of influence and responsibility into the hands of the staff and the chairman of the appropriate committee, Miss Muriel Stewart, an ex-president of the N.U.T., is chairman of the C.S.E. Committee.

Morrell himself has taken a close interest in the work on examinations. The C.S.E. committee has been served by an officer of principal's rank and an H.M.I., and the papers on subjects like monitoring would come from the educational research teamMr. P. H. Taylor (director of studies), Dr. E. J. Shoesmith and Dr. R. J. Harris.

This, in theory at least, is how it works. The Council itself and its numerous sub-committees are only able to act and react in relation to what the staff serve them up. But they can ask questions and ask for papers. They can indicate lines of inquiry they want pursued. And it is for them to adopt or reject the suggestion put to them. The staff have clearly a sphere of independent action, but the effectiveness of what they do depends on their being able to carry the committees with them.

English for immigrants

Let us look at another subject which the Council is caught up in—English for immigrant children. A major project on English was chosen from the start as one of the Council's first concerns and early links were established with the Nuffield Foundation's linguistics project. The desirability of a special project on English for Immigrants arose out of the drafting of the first working paper for the English Committee of which the chairman is the former senior chief inspector, Percy Wilson. The English Committee being a subject specialist group clearly take a larger hand in drafting their own documents than—say—a committee on examination.

Anyway, their first working paper went to the Council as a whole via the co-ordinating committee in the summer of 1965. It was published later in the year. Having run the gamut of the Council's committees, the definition and delimitation of the problems it set out became the guide for future action. The initiative passed back to the staff. A paper was put up to various committees (including the general purposes committee which controls the money) outlining the next steps-consultation with the National Association for the Teaching of English, with the Inspectorate, and with other knowledgeable people through the English Committee. This in turn led to a recommendation (which was adopted) that Miss June Derrick, a lecturer in English at Leeds, should be commissioned to carry out a year's feasibility study into the need for, and organisation of, a major development project (on lines made familiar by the Nuffield schemes). Miss Derrick began work in the autumn of 1965, and produced an advanced report within six months endorsing the need for a development project on these lines including the preparation of teaching schemes and materials. This has now been accepted and will go ahead later this year. Miss Derrick is continuing to lay out the main lines on which developments should take place and to define the respects in which multiple co-operation is required. From a strictly technical viewpoint—which is what I am trying to get at in describing how the Council operates, not whether it is any good or not —the main source of action has been the English Committee and its staff. The Committee is composed mainly of school teachers, training college and university lecturers. The secretaries are an H.M.I., Miss K. M. Burton and a higher executive officer, Mr. E. Pruess.

The activities which spring from the reports, as approved by the Council at the end of the day, come under the responsibility of one or other of the three joint secretaries—in the case of the English Committee it is Mr. J. K. Owen.

If any good comes out of a procedure like this set out step by step, of course, it seems far more cumbersome than it is in reality—it does so when the committee in question asked the right question and insists on the right answers. The staff are anxious, naturally, to keep the committees in the forefront and themselves in the background, but in reality the committees are unlikely to be any better than the staff who serve them.

By now the techniques of development (as opposed to research) are becoming fairly well established, Nuffield having paved the way. Everything depends on building up suitable teams according to the nature of the project. The brilliant practising teacher is better brought into the picture as a seconded member of a development team than as a nominated member of a big committee. The cost of a development group, including the services it needs to enjoy, works out at about £4,000 for each year.

Local development centres

The most exciting developments for the Schools Council at present are to be found in the local development centres which are being set up all over the country. About 100 have so far been createdsome by single L.E.A.s, like London, Surrey, Kent, Northumberland, often with close university links. In other cases, groups of L.E.A.s have got together to form centres. Where the record of co-operation between universities and L.E.A.s is good the local development centre could be an important way of extending the work of the Schools Council and increasing the scope for individual experiment and reform. Nothing could be more stultifying than for the Schools Councils' activities to suggest that a central body should have the monopoly initiative. Nor is anything likely to make the beneficial activities of the Council itself more rapidly apparent than a healthy spread of local activity.

Discussion

Dangerous Options

I am glad to see that in my Summer issue of FORUM, the question of whether schemes for secondary-school reorganisation put up by L.E.A's to the D.E.S. are genuinely comprehensive, or 'interim' schemes designed to perpetuate selection and segregation, is being carefully watched by your Editorial Board. Bearing this in mind may I venture to suggest that there are two 'options' which should be examined in view of recent developments which have taken place ?

No. 1. The so-called 'West Riding' scheme has now I believe received the D.E.S. approval. This involves of course the ending of the last two years at Primary school. It must have occurred to others besides myself, that in certain (particularly older urban/suburban) areas, the adoption of the West Riding scheme could result in a much reduced programme for primary school re-siting and re-building, on economy grounds. In other words, in some areas, slum and obsolescent primary schools would have a much extended 'life' because of reduction of over-crowding.

No. 2. The so-called VI form college system which many of us have been enthusiastic about, seems to have been considerably modified since the publication, for example, of the Luton study group's 'Vision of a Sixth Form College'.

This publication clearly envisaged a largely nonselective college, offering a wide range of 'A' level, vocational, non-academic, 'rare' subject 'O' level and 'Liberal Studies' courses. I see however in the Comprehensive Schools Bulletin issue No. 3, that a Sixth Form college scheme for Luton, 'strictly as an A-level academy', has been passed by the D.E.S. One would hope that this is regarded as a genuine interim scheme, and not as another (modified) form of secondary school selection. H. A. HORE, Warwick.

National Policy in Education

It is of course true that the 1944 Education Act gave the Minister the right to determine educational policy. It gave him virtually unlimited powers in effect, as Lord Butler recently acknowledged in a television interview:

"... the Education Act ... laid down no actual model—that is the beauty of the Act—but left it to local education authorities to work out what they thought was the best model for secondary education ... the Education Act is of permanent benefit to the statute book, because it does leave so much discretion to the people of the day."

The people of the day with so much discretion seem to have been the Ministry, not the local authorities, however. I find it difficult to understand why an apparently progressive educational journal should face the fact of central direction of educational policy by administrative fiat with such equanimity. This would be bad enough in itself since no-one is being offered the chance to make an open and public *political* decision, and the obligatory nod in the direction of "the very important role local authorities can and do play ..." seems to be forgotten when "national policy" is discussed at a later stage in the paragraph. One would think that the national policy was the result of some popular upsurge of demand from below. Not at all, it is being framed by the administration because it has the power not to approve school building programmes.

The major part of your Summer issue is devoted to the content of education. Yet the editor seems to have forgotten the relationship between the *control* and the *content* of education which he himself so clearly reveals in his study: "Education and the Labour Movement 1870-1920". Surely the lesson of 1902, and indeed of the whole history of education in Britain is that the content of general education has been defined by administrative minutes and codes, and that these definitions relate not to the demand for education that the establishment considered safe and appropriate for the working class.

The vigour with which the socialist groupings contested the school board elections in the late 19th century was directly related to their concern about the content of the educational provision their children should have.

I find no reason to believe that in our complex society the needs of the population are any less relevant or important for the formulation of a really progressive educational system. Indeed if we are serious about developing public participation in political affairs, the need to equip ourselves with the relevant educational skills and know-how is more crucial now than ever. Too much information is already unintelligible to too many people, and the more specialised it becomes the more it is easily restricted in its circulation.

This crucial problem is surely an important component of the "comprehensive principle" in education, and was surely a central concern of the labour movement's demand for popular education provided by the state as well as by its own independent educational efforts.

Are we to believe then that central government and administration has suddenly, with the advent of a Labour Government, become so sensitive to public needs and so tuned-in to all the views about education in our society that we can safely dispense with any avenue of public control and accountability apart from the House of Commons? Or should we conclude that governments are in danger of becoming too authoritarian (whether in the field of education, or prices and incomes), and that we need to strengthen the democratic processes at other points in society? Whatever way, public control in a democracy can't guarantee that any of us will have our own way all the time. Your editorial seems to imply that local authorities should be free so long as they conform with central directions, and it assumes that central administrative decisions are the highest and only form of public control.

ROY HADDON, Kettering.

Review Criticism Reply

It is scarcely customary for an author and a reviewer to find themselves on a joint charge. But this is what I find after reading Eric Linfield's comments on the review of my book in FORUM (Summer 1966) to which Mr. Linfield may be surprised to learn that I regularly subscribe.

He comments on the omissions which he notices in the published material to which I refer. I would offer three answers. First, the manuscript was submitted in the Spring of 1964, thus eliminating more recent material. Brian Jackson's book was mentioned in a footnote not because I thought it too unimportant to discuss in the text but because I thought it so important that I prevailed on my publisher to squeeze the reference in as 'stop press'. Second, I aimed to lay particular emphasis on significant research findings, and after considering the published numbers of those journals, my knowledge of whose existence Mr. Linfield appears to doubt, I felt that they did not clamour

At School Till Sixteen

A Critique of Schools Council Approaches

NANETTE WHITBREAD

Nanette Whitbread is a senior lecturer in history and education at the City of Leicester College of Education. She has taught in two secondary modern schools, one of them non-streamed, and in a London comprehensive.

'A programme of activity in preparation for the raising of the school leaving age' was given high priority by the Schools Council when it first met in October 1964. Accepting the urgent need for curriculum research, including pilot projects and field trials, it decided to publish a series of *Working Papers* to provide interim progress reports and guideline suggestions for further enquiries in order to inform and involve practising teachers in this essential research. There is strong emphasis on 'generating local thought and activity' and on the need for 'feedback' of teachers' reactions. All this must be welcomed and the challenge taken up.

Working Paper No. 1 is a first report of the exploratory phase of the Nuffield Foundation Science Teaching Project. After a brief assessment of current science teaching, it suggests in some detail a topic syllabus under eight main, interrelated themes for 'those of average and below average ability between the ages of 13 and 16, i.e. the 'Newsom pupils'. Working Paper No. 2 is more general, being directed at 'the curriculum as a whole, and for further quotation within the tight compass of my particular assignment. For, thirdly, the full title of the book is *English Primary Education: A Sociological Description.* It was not my intention to appear to pontificate about all aspects of the education of young children as might appear from the first three words in isolation.

I hope that this explains a few points which ought perhaps to have been made clearer in the text and title. For my part I am grateful for a refreshing dose of candour when it is so obviously mixed with generosity.

May I add that my reviewer and I are very much concerned with what actually happens in ordinary schools and would go green at the gills if we were required to take the role of clinical sociologists working in isolation from, rather than in collaboration with, Primary school teachers—or College lecturers, for that matter.

> W. A. L. BLYTH, School of Education, University of Liverpool.

on work in the humanities in particular'. It outlines 17 Enquiries which the Council considers necessary preliminaries for a constructive approach to a higher school leaving age, and makes suggestions for development work in the main curriculum subjects on the basis of accepting most of the premises and recommendations of the Newsom Report. Thus it can be viewed as exhortation to follow up this Report in preparation for legislative implementation of its first recommendation.

Such exhortation is presumably deemed necessary because curriculum research and development in other subjects is unlikely to be financed in the same style as the Nuffield Foundation Science Teaching Project: only a feasibility study is being undertaken in the humanities and mathematics, though the latter may lead to extension of the Nuffield junior mathematics project; and there are 'no immediate proposals for centrally organised development work in other subject areas'.

More serious is the difference in focus between the N.F.S.T.P. and the research that *Working Paper* No. 2 is designed to foster. The former is concerned with five-year courses for the whole age range 11-16, and with 'O' and 'A' Level schemes, as well as with integrating teaching in the sciences and mathematics. It can thus be related to the perspective of comprehensive education even though its sub-group is particularly concerned with 'Newsom pupils'; for this group 'emphasises the view that development work in this field should not assume one kind of science for the academically gifted pupil, and a different kind for those pupils who were the concern of the Newsom Report'. But the whole emphasis of *Working Paper No. 2* is on those of average and

below average ability, despite its recognition of 'the growth in the average level of attainment amongst young school leavers'. Nor will the choice of the phrase 'aptitude for scholastic work' instead of the Newsom term 'ability' alter the separatist or bipartite implication. Moreover, the *Paper* is primarily concerned with the last year or two: it does not preclude, but nor does it overtly encourage re-thinking of the whole, lengthened secondary course.

Circular 10/65 ignored

The implications of Circular 10/65 on comprehensive secondary reorganisation were ignored in this *Paper* published the following month, despite the fact that the general line of Government policy on this has been known for some time and the trend previously established in many areas. Following the unfortunate failure of the Newsom Committee's comprehensive school sub-sampling, the need for research here should have been already apparent. Now it is essential that established comprehensive school experience be fully exploited, and additional pilot development projects undertaken there; for teachers in these schools undoubtedly have much to contribute that will help those who have hitherto taught in either of the bipartite sectors.

Linked research needed

Curriculum development, and the research necessary for it, needs to take place in the three allied contexts of comprehensive secondary education. non-streaming and a lengthened school life. Within these three contexts great significance must be attached to the Newsom Report's important statement that 'intellectual talent is not a fixed quantity with which we have to work but a variable that can be modified by social policy and educational approaches'. It is towards seeking these educational approaches that the current 'programme of activity' must be directed. There is now ample evidence of the educational advantages of non-streaming, as increasing numbers of secondary heads and teachers are recognising; rather than mark time waiting to study the results of the N.F.E.R.'s study, now is the time to embark on research and make available information on current experiments in teaching methods and skills appropriate to non-streamed schools.

It is disappointing that the *Working Papers* give no lead here, for this should prove a profitable field for local activity and exchange of ideas. Wherever selection at eleven-plus has been genuinely abolished one early result has been a trend towards unstreaming in local primary schools; the move towards following this, at least in the first two or three years, with non-streaming in the secondary schools has been made in an increasing number of instances. Circular 10/65 is therefore likely to give momentum to these trends. Heads and staffs of new comprehensive schools, which will be formed as the various comprehensive patterns are established, will be anxious to learn of the experiences of those who have already been teaching in a non-streamed situation. A further Working Paper on this would undoubtedly be valuable. Meanwhile, the general guidance contained in Appendix B of *Working Paper No. 2* on how to structure and organise local development centres could prove helpful for preliminary work.

The Robbins Committee demolished the concept of a static and limited pool of ability. The ten paragraphs 137-146 of the Report are highly relevant to any consideration of approaches to raising the school leaving age, which will itself enable us further to tap 'the reserves of untapped ability'. An important argument recurrently emphasised in Working Paper No. 2 is 'that success in the development of new curricula, courses and methods may depend very largely on the realisation that many existing assumptions derive from experience of pupils far less mature than those who, from 1970-71 onwards, will complete five instead of four years of secondary education. It is suggested that this greater maturity provides a major opportunity to develop an approach to secondary education which will differ from the present approach more, and certainly more importantly, in the range and quality of the work that is attempted, than in its quantity. More of the same will not bring success. It is not the "extra year" that makes the difference; the opportunities of a five-year course are totally different from those of a four-year course'. Comprehensive education and the extension of non-streaming will reinforce these qualitative differences. This means that curriculum research must take account of Crowther pupils and their immediate juniors as well as Newsom pupils.

New aspirations at 16

Moreover, the revolution which these legislative and organisational changes make possible in secondary education will be likely to have a profound effect on the students' own attitudes and aspirations by the time they reach 16. Raising of the statutory age has always led to further voluntary staying on, and the proportion doing so in comprehensive schools has tended to be relatively high. Successful preparation of the kind postulated in the *Working Papers* contains within itself the potential need to prepare for extended education beyond 16. And by the 1970s the secondary schools will contain an increasing proportion of the second generation secondary pupils whose parents will demand extended education for them. For all these reasons we will be well advised to bring the Crowther Report off the shelf for our curriculum studies.

There was a good deal of confused thinking about intelligence, ability, attainment and achievement in the Newsom Report, some of which recurs in the Working Papers. But if Crowther and Newsom pupils are looked at together much of this confusion disappears, especially when an assessment begins to be made of the responsibility of educationally unsound curricula and teaching methods for apparent failure on the part of the pupils. Indeed, though these Working Papers purport to be concerned exclusively with Newsom pupils, their most constructive criticisms and suggestions apply to all adolescents. All need the security of achievement. All need to be allowed some freedom of choice, to learn to make judgments, to see the relevance of their studies, to be helped to solve personal problems and to develop an adult sense of responsibility; just as all learn most effectively when interest is aroused or heeded, depth study encouraged and problem-solving techniques used. And all would undoubtedly gain from more oral work, discussion, practical and experimental work.

The lead given in *Working Paper No. 1* in advocating thematic syllabuses, topic work and assignment sheets indicates an approach that is likely to prove equally appropriate in the humanities. Just as 'opportunity to think or to act scientifically, even at a very elementary level' is essential in science, so it is in much geography and history; and so, too, is genuine linguistic and aesthetic experience in vernacular and foreign languages and the arts. If this *Paper* helps to demolish the concept of watereddown, superficial and emasculated curricula as apposite for half the secondary school population it will have made a contribution of fundamental importance.

One corollary of the investigations outlined in these *Papers* is that there will have to be better equipment and facilities, Another is that new demands will be made of the teachers who will therefore need help in furthering their own professional education. The feedback of their reactions is likely to be more favourable if they are assured that these needs will be effectively recognised.

- Working Paper No. 1. Science for the young school leaver, is distributed free by the Schools Council.
- Working Paper No. 2. Raising the school leaving age. H.M.S.O. 3s. 6d.
- Working Papers Nos. 4 & 5 on Sixth Form curricula will be discussed in the next issue.

The Schools Council looks at English

EDWARD BLISHEN

'One of the first decisions of the Schools Council ... was to recognise the need for a major initiative in the field of English teaching.' To lay ears, this first sentence of Working Paper No. 3 (simply called 'English') may not have much of the clarion call about it: but to many of us, and not only teachers of English, the militant resonance of that phrase 'major initiative' must be as stirring as the order to advance would be to an army that too long had been confined to small disjointed sorties. As Mr. Percy Wilson said when he introduced the Working Paper to the press, the improvement of the teaching of English is an 'unspeakably urgent purpose.' And as the Paper itself demonstrates, improvement involves taking a long look at the present state of our teaching and of research, and deciding on 'priorities for activity ... in the areas of research, enquiry and development': all of this given the importance and impetus that can be provided by a body with the Council's resources, its terms of reference and its ability to act as a central workshop and clearing house.

Call for comment

The Working Paper represents 'an open invitation to all teachers and others concerned, including those who are not teachers of English, to offer . . . comments and criticisms.' One of the problems the Council has to face is the difficulty such an invitation may have in getting itself heard, among teachers incurious about professional literature or short of built-in opportunities for discussion, and perhaps more ready to suspect a Schools Council of dictatorial intentions than to heed its pleas for their participation. As Mr. Wilson said at the press conference, we simply have not got a system of inservice training 'such as is possessed by all the other great countries of the world': and while this is so, and while we wait for the establishment of the local development centres described in Part IV of the Paper, the habit of reading and responding to literature such as this will continue to be confined on the whole to a minority of specialists.

It is difficult to imagine a verdict on this *Paper* that would see it as anything but an immensely stimulating challenge to discussion and an exciting prospectus of work to be done. Part I of the *Paper* is a sharply-focused survey of the present state of English teaching and of the problems facing

teachers of English. It begins by asking how far English is a subject at all. For young children, it points out, English is not in any sense a subject but 'an activity permeating their lives.' One wonders, perhaps, why the authors should limit this truth to young children: but indeed they have a useful formula for the extent to which, later, English can be allowed a separate existence-they talk of 'its own necessary area of concentration.' Here, and later, the Paper points to those defects in teaching that arise from 'the teacher's inadequate personal equipment for his task': and at one point, having laid a profoundly welcome stress on the ultimately personal nature of English, the authors suggest that many teachers may bring an impersonal attitude to their teaching 'because they themselves have little response to the literature they read, and no interest in expressing themselves in words.' Here surely is the heart of the problem: we cannot hope for effective teaching from teachers who themselves bear none of the marks of people who have been blessedly scarred by the excitements of reading and writing and talking. The Paper traces the trouble back to teacher training, but might have looked further back, to that vicious circle in which dull schooling produces dull teaching-and indeed to the whole crippling conception of the 'average teacher' (as leaden a notion as that of the 'average child') who is modestly resigned to being an unexciting journeyman. But the Working Paper does not fail to point to what it calls 'physical and material hindrances'----to the absence in most schools of any room designed to be, or convertible into, an English workshop, and to the general paucity of modern equipment (for example, and especially, tape recorders).

Common hindrances

Here, in Part I, are trenchant observations on the teaching of speech, of reading ('We cannot expect children to treat books as ducks treat water'), and of writing (a strong attack on premature formal essay-writing and attempts to hurry the transition from personal writing to impersonal. The authors usefully urge that impatient universities and employers must expect 'some part of the teaching' here to fall to them). Background difficulties are looked at—such as lack of continuity in teaching, and the common frantically quick turnover of staff—together with the cramping effects of our current types of examination.

An excellent summary, in fact, of views now widely agreed as to what is good and bad in our English teaching. Part II moves on to look at the field of research. Reading this through, one is struck again by how little we really *know* about the teach-

ing of English and its effects. Elsewhere the Paper comments that much research now being done is disappointing because it is unco-ordinated, does not reach the teachers, and is most often carried out by researchers with inadequate experience in the schools. Here at last, in Part II, is the basis of a determined effort to draw the threads together, to make a purposeful pattern of short-term and longterm projects, and to establish priorities. The last must be the most difficult, and it is here that teachers ought to be feeding back to the Council their most considered and forceful comments. There are, for example, in the section devoted to reading, a dozen projects all of which teachers with a real concern for their work would wish to be put in hand at once: and it would be a pity if there were not the widest possible debate on such a question as whether it is rather more important to 'investigate the value of extensive reading as opposed to a highly selective. graded approach' than 'to find out how to improve the reading speed of abler pupils.' Or do we think it most urgent to bring to an end a long history of largely metaphysical and subjective argument by really determining whether writing is improved by the analysis of model passages and their imitation, or by the teaching of elementary logic, or by the teaching of grammar of some kind? The Council has already gone ahead with the commissioning of a major project in the field of communications, which, among other things, will 'analyse what is necessary to a child from two or three to sixteen if he is to be regarded as competent in his mother tongue.' A smaller and plainly urgent study is under way that concerns itself with the teaching of English to non-English speaking immigrant children. Where, with so many vital directions possible, shall the Council move next? About this teachers ought at the moment to be arguing furiously, as they should about the enquiries into further startlingly uncharted territory-that of the curriculum and of pupils' and teachers' attitudesthat are dealt with in Part III.

A personal approach

Part IV concerns itself with the special problems of organised development work in English that arise from the fact that, in English, while 'there is certainly a growing consensus on aims . . . it is intrinsic to the subject that methods and materials must always be highly personal.' This makes development in this field difficult to organise, but does not diminish the urgent need for it. In suggesting that both local and major development centres are called for, the paper notes three main requirements: that the work should be school-based, that it should be co-operatively organised, and that it should have the support of other agencies. In some ways, since the chief need of our teaching can be seen as that of drawing teachers into constant contact and discussion (as well as giving them time for thought and for enlargement of their experience), this is the most original and exciting section of the *Paper*: which ends with an appendix dealing with aspects of research into the language and its teaching already being prosecuted—half a dozen pages that might be taken as a forerunner of that 'map of existing knowledge' in the field of research, the preparation and publication of which the Council has identified as an important form of support it might give to teachers, local education authorities and others.

On the edge, as it were, of this major paper, two Examinations Bulletins have appeared that fascinatingly chart new and promising country. No. 12 describes an essay in the multiple marking of G.C.E. 'O' level compositions that not only establishes the superiority of this method over a typical conventional method, but also holds out the promise of a far more subtle categorisation of kinds of writing than is now common. No. 13, similarly, whilst concerned to describe a series of trial C.S.E. examinations in oral English, is immensely readable as much for observations in the margin as for its slightly hesitant conclusions as to the superiority of one examining technique over another. Both bulletins suggest what an educative experience these experiments are for all those concerned in them: and both, one might say, throw light on what should be the most heartening effect on our teaching of the work of the Schools Council, so long as teachers keep it closely tied to the reality of teaching — that to research and inquire, to obtain hard results and to join in discussion of their meaning, is among the best of ways for a teacher to make adequate his 'personal equipment for his task.'

Working Paper No. 3. H.M.S.O. 3s. Examinations Bulletins Nos. 11 & 12. H.M.S.O. 2s. 6d., 3s.

Conferences and discussions on non-streaming

Although in many cases plans are not finalised it is already clear that a number of conferences and discussions on non-streaming will be organised in various parts of the country during the coming year.

The Institute of Education at Reading University has already held a one-day conference and may be organising more. The Exeter Institute of Education has plans for a short residential conference after Christmas. The School of Education at Leicester University is running a teachers' study group which

The Schools Council looks at Maths

DAVID WHEELER

David Wheeler is a lecturer in education at the University of Leicester School of Education. He has written articles on the teaching of mathematics and assisted in the production of textbooks involving a new approach to mathematics teaching

A review of these pamphlets printed so long after they were first published need hardly concern itself with an outline of their contents and recommendations to buy or not to buy. Schools and individual teachers who are professionally concerned with mathematics have almost certainly got their copies already. It is more interesting, at this stage, to look at this particular collection as a sample of the prolific activity of the Schools Council and its predecessor, the Curriculum Study Group.

With the exception of the *Field Report* (which gets a special mention later in this review), the pamphlets are attractive in appearance and written in a simple direct style. The texts avoid using 'civil service majestic' and '*Times Educational* evasive'. There is a definite air of commitment, of an effort to communicate and convince. The writers seem to have confidence that they are speaking to people who want to understand them, and they are not afraid to be persuasive.

Curriculum Bulletin No. 1 looks good, reads easily, and has managed to carry into print a lot of the vitality and enthusiasm of Miss E. E. Biggs' work. It contains plenty of convincing examples of mathematical things that primary school children can do, and reports a large number of interesting observations from classrooms. As a source book of practical suggestions for teachers it is invaluable. Perhaps the generalisations about children's learning are not wholly convincing, and some of the dogmatic statements about what this or that bit of

(Continued on page 25)

will meet weekly over the next two terms. In addition we understand that teachers in York may be running a one-day conference during the year, and that the Gloucestershire education authority and Nottingham Institute of Education both have plans for a one-day conference on non-streaming in secondary schools.

There are almost certainly other plans on foot in addition to these. If readers have any further information, please let the editor know, so that these can be announced in our next issue. (*Ed.*)

Mathematical Forum

By arrangement with the Nuffield Foundation, Murray and Chambers have just published jointly an interesting paperback—*Mathematical Forum*. Edited by D. E. Mansfield, this is an anthology of all the material of permanent interest in the first five issues of the *Bulletin* issued by the Nuffield Mathematics Teaching Project.

The Bulletin was launched in order to act as a forum in which practising teachers of pupils aged 5 to 13 could describe and discuss the new methods they had found successful. It also contains useful information on the ideas of 'modern' mathematics and gives an account of the progress of the Project under the leadership of Dr Geoffrey Matthews.

As Dr Matthews says, the *Bulletin* 'terrified some people, annoyed others and interested and inspired many more'. Its usefulness has been shown by its growth in circulation in a year—from about 1500 to more than 20,000 per issue.

Anyone concerned with the teaching of mathematics to children of 5 to 13 will find *Mathematical Forum* a valuable digest and a thought-provoking reference book of permanent value.

Paperback

8s. 6d. net

Please write to either of the publishers:

W. & R. CHAMBERS 11 THISTLE STREET EDINBURGH 2 JOHN MURRAY 50 ALBEMARLE STREET LONDON W.1 mathematics means are frankly questionable. But one reads the book knowing that its production was mainly the work and the responsibility of one person; and that person is not concealed by anonymity.

How much difference it makes knowing this is difficult to assess, but I cannot help feeling that it is all advantage. In an ideal world, I suppose, the only authority a publication has would lie in the truth of its statements. But in practice the authority of an anonymous publication derives most of its force from an awareness that its statements have been found acceptable by some group of people in the background, whereas the authority of a signed publication rests mainly on the popularly ascribed authority of the individual author. Neither situation is particularly healthy, but at least the latter is more accessible to scrutiny.

Without discussing at much greater length than is possible here the large and crucial question of evaluation and the place of examination procedures in it, the *Examinations Bulletins* cannot be properly considered. In any case, the two in my pile should really be read in conjunction with others in the series. What can be said? Certainly that the experiments described are likely to lead to the construction of more reliable examination papers in mathematics (if that is what we want). The experiments will have some marginal influence in showing that test questions need not be concerned solely to measure the retention of skills, and that there are alternative methods of constructing test questions, each with its particular merits. All this is to the good.

Constriction of C.S.E.

Nevertheless, the *Bulletins* are written from a situation constricted by the existence of the C.S.E., a system which the authors might well not have chosen if they had been free. There is very much an impression that they are desperately trying to make the best of a bad job. A number of the questions raised in the *Bulletins* either would not be formulated or would not have to wait for an answer if the writers were not forced to work in this small world. Is there really a choice to be made, for example, between constructing an examination with high discrimination or constructing a test which will have a favourable 'backwash' effect?

It would not be right to blame the authors of these pamphlets for the inconsistency of supporting a school-based, teacher-controlled examination, when much of the statistical jargon they use implies a profound scepticism about the teacher's ability to assess. We are all caught up in this one.

Even though only some four or five years has gone by since the first work recorded in these

pamphlets began, there is internal evidence of the effects of some of this work. Examinations Bulletin No. 7 (p. 27) says, 'Meanwhile it is not without significance that not only a number of schools up and down the country but several of the Regional Boards for the C.S.E. examinations have decided to include multi-facet questioning (first described in Examinations Bulletin No. 2) as at any rate part of their system of examination.' The Field Report, after recording the work of Miss Biggs (the basis of Curriculum Bulletin No. 1) and the subsequent initiation of the Nuffield Mathematics Project, says (p. 3), 'Despite the short time which authorities were given to consider the implications and to consult their teachers, no fewer than 100 (out of the then 145) authorities expressed a readiness to provide pilot areas, or alternatively to provide second phase areas for the extension of the project during the following year.'

Enthusiasm for change

The rapidity and extent of the enthusiasm for change that these two statements indicate is almost beyond belief. When, in the past, have educational decisions of comparable significance been taken so quickly? Without doubt, never. (I do not intend here to exaggerate the magnitude of the changes; that they are taking place at all on this scale is enough.) The quality of the ideas behind the changes is unlikely to be the principle factor in the situation. Similar or better ideas have met with less success. It may perhaps be that the time is ripe and the climate especially favourable. But like the concept of 'readiness' in the classroom, such a statement adds nothing to the observation that something has happened. We still may not know why it has.

The Field Report helps here. At the risk of elevating an indiscretion to a symptom and thence to a cause, I would draw attention to its title. The report is in fact solely concerned with the progress to date of the Schools Council-Nuffield Foundation project. This is indeed made clear, in small print. The text hurriedly channels the whole history of primary school mathematics teaching into the current development of the project. Nothing else is acknowledged to exist. The implication is of some messianic culmination with Miss Biggs in the Baptist's role. The adjective 'experimental' which is found in earlier references to the project is conveniently forgotten here. For a moment the mask has slipped.

The compilation and distribution of this *Field Report* can only be explained by assuming that it is designed as advertising matter. It betrays all the signs—of selection and omission—which one associates with an attempt to sell a commodity, or at least to make it seem desirable. With several Nuffield-sponsored projects on the market, and rumours of more to come, the establishment of a good brand-image is going ahead apace. I find this, from where I stand, a thoroughly nasty little document.

Pressure to conform

Of course each of these pamphlets properly stresses that it offers only evidence and advice. No attempt is made to coerce teachers to change their ways. But I am left with an uneasy feeling that the protestations of permissiveness are either naïve or dishonest. It is the paradox of a non-directed system that unless it deliberately encourages the positive exercise of freedom, it produces its own species of ham-stringing conformities. The American educational system has been described as 'freedom to do what everyone else does', and the remark hurts here too. Without some deeper analysis of the forces operating in the kind of 'free' system we have-and may well wish to maintain-we shall stay smothered by it. Rattling clichés about-'teacher participation' for instance-is not an adequate substitute for studying the real sources of power and decision in the educational structure. Knowing these would seem to be a necessary prelude to using them and restraining them. Whether the members of the S.S.C.E. understand the situation is not entirely clear, but certainly the profession as a whole has not begun the analysis.

So...? Maybe all will be well. But will we regard the evidence and suggestions in these pamphlets as carrying no additional weight just because they come from the S.S.C.E.? Will we use the same criteria to judge the curriculum development work of the S.S.C.E. as we would the work of any other researchers? Will we criticise the Nuffield-Schools Council projects as sharply as we have criticised, say, S.M.P. or M.M.E.? We are, of course, 'free' to do so. But unless there is a *real* freedom for the average teacher to take or to leave what he is offered, we shall see that the S.S.C.E. is not the herald of a new era but the worst features of the old in disguise.

I stray from my brief. The pamphlets are there; they contain some good things and some provocative ideas. Let's use them freely for our own purposes.

C.S.E. Experimental Examinations: Mathematics

Examinations Bulletin No. 2. H.M.S.O. (1964), 36 pp., 3s. 6d.

Examinations Bulletin No. 7. H.M.S.O. (1965), 74 pp., 4s. 6d.

Mathematics in Primary Schools, Curriculum Bulletin No. 1. H.M.S.O. (1965), 160 pp., 10s.

New Developments in Mathematics Teaching, Field Report No. 1. 12 pp.

C.S.E. on Trial

Monitoring of C.S.E. by means of aptitude tests is causing grave concern within the teaching profession, and has been consistently opposed by the N.U.T. Yet the Schools Council seems determined to press ahead with this procedure and to extend it to G.C.E. in an attempt to measure national comparability between the two types of examinations and between their respective Boards. This much is clear from the report, *Examining at 16*+ (H.M.S.O., 2/6) and from *Working Paper No.* 6 (Part I, 3/6; Part II, 5/6).

It is clearly important that C.S.E., especially in the Mode 3 form, become nationally accepted, and highly desirable to bring some rationality into the G.C.E./C.S.E. confusion. But there seems some ground for suspecting current monitoring techniques of introducing elements of the discredited intelligence tests in a new guise. The problem dates back to the concept of stratified levels of ability which should be reflected in secondary school examinations, as postulated in the Beloe Report (Chapter IV, particularly paragraph 109).

Issues of profound educational significance are undoubtedly in question. We therefore hope to further discussion with an article on C.S.E. monitoring in the next number of FORUM.

Meanwhile we consider some more C.S.E. Trial Examinations. (*Ed.*)

Science. J. F. EGGLESTON of the DES-sponsored Research Unit for Assessment and Curriculum Studies, at the University of Leicester School of Education, discusses Examination Bulletin No. 8 (H.M.S.O. 3s.).

This is a readable yet precise account of two trial examinations in Science at C.S.E. level. Many fundamental problems which are faced by those who wish to produce measuring instruments of attainment are discussed, and in some cases possible solutions offered. The end product of this investigation is not a definitive specification for C.S.E. Science Examinations ! The account does, however, bring to the attention of examiners most of the questions about science examinations and other assessment procedures to which answers must be found. Some methods by which solutions may be sought, criteria on which judgments may be made, and analytical techniques appropriate to the methods of assessment used, are given due consideration.

In common with other similar trials undertaken by the Schools Council, this experiment attempts to encourage critical discussion and a fairly rigorous analysis of methods of assessment. At the same time the authors have kept in mind an ideal of the examination which would 'reflect and tend to encourage good teaching practice.'

The assessment procedures used in the trial of 1965 included a 'Scientific Thinking' paper, a 'Knowledge of Facts and Principles' paper, a practical examination, and a teachers' assessment of course work. The relative weighting of the marks was such that half were awarded internally and half externally. The 'Scientific Thinking' paper, while it contained some ingenious questions, was only partially successful in measuring scientific abilities reliably. The conclusions reached by the authors indicate that the success of this paper should be measured not merely by its performance measured in statistical terms, but at least equally by the pointers to further enquiry which it produced.

If we wish to measure the development of scientific abilities in our pupils by reliable and valid methods, conventional long-answer questions which demand the operation of an ill-defined range of skills in the candidate, and subjective decisions by markers are seen to be inefficient. However it may be doubted if the authors of this test went far enough towards designing objectively marked questions, based on the precisely described scientific abilities listed by the authors. The practical paper, new to examinations at this level and therefore not fettered by tradition, seems to have been in most respects an effective instrument.

The importance of this bulletin lies in its frank evaluation of the trial's shortcomings, and the recognition that the improvement of assessment techniques depends on a critical, flexible, enquiring attitude in those who are responsible for designing and implementing assessment procedures. There is a danger that the early attempts by C.S.E. Subject Panels to produce assessment procedures might too readily become a new orthodoxy. One hopes that the self criticism of the Steering Committee who were responsible for this trial will be emulated by C.S.E. Boards. The Committee seems to have been unnecessarily severe in the applications of the criterion of validity to parts of its procedure. Three papers and the teachers' assessment of course work gave estimated validities of r = +0.4; r = +0.1; r =+0.6; r = +0.6. These coefficients have been derived from a comparison of pupils' scores in each of these parts of the assessment with a 'forecast of the overall performance of each pupil entered . . . (relative to average defined as) . . . C.S.E. grade 4'. As teachers were not acquainted with either C.S.E. or the precise nature of the demands to be made on their pupils, the use of this criterion to estimate 'the extent to which the paper is measuring that which it purports to measure' would seem to have been somewhat ill advised.

Technical Drawing & Handicraft.

FRANK WORTHINGTON, Senior Lecturer in Handicraft and Education at the College of S. Mark and S. John, Chelsea, discusses Examination Bulletin No. 6 and No. 13 (H.M.S.O. 2s. 6d. each). The steering committee for the experimental examinations in technical drawing devised three papers to examine different areas of study. Paper I was an objective comprehension test covering isometric and orthographic projections, assembly problems, and examples of functional design. Paper II involved drawing from the solid, and Paper III was a less unusual test in which knowledge of geometry was tested in realistic situations. The validity of the results was established by comparing test scores with teachers' estimates of pupil attainment.

The objective test used some new techniques and sampled the candidates' comprehension over a wider area than is usually possible in a single test. *Paper II* proved to be a success. Drawing from the solid has long been thought a valuable and underemployed part of drawing courses. The introduction of this work in examinations could encourage its more widespread use. Some questions in *Paper III* tested the candidates' mastery of the vocabulary of the subject, and their ability to give a verbal description of objects drawn in orthographic or isometric projection. This deliberate linking of verbal and graphical methods of communication has much to commend it.

Analysis of the test results showed that the new methods of examination were feasible and valid. They appear to be worthwhile additions to the range of examination methods commonly employed, and may help examiners to produce less stereotyped forms of tests.

The trial examinations in Handicraft were initiated by the Association of Inspectors, Organisers, and Advisory Officers, and covered both woodwork and metalwork (as separate subjects). The examinations were in three parts. The first part, on Craft Planning and Practice, tested the candidates' ability to plan, and then to make one of three suggested articles. A theory paper, *constituting part two of the examination*, was carefully related to school workshop experience. For part three the candidates were asked to produce, in their own time, a personal study of not less than 500 words, on a craft topic.

The statistical analysis and discussion of the results was extremely interesting and informative. There was evidence to suggest that either metalwork is intrinsically easier than woodwork, or that more of the able pupils had chosen, or had been directed to take it. Candidates choosing some of the articles on the Craft Planning and Practice paper gained higher scores, on the average, than candidates who

selected other alternatives. Validity was checked by comparisons with teachers' estimates of the candidates' ability, and the disparities seemed to be a function of choice and ability, and not of the apparent ease or difficulty of the several articles. Further research may show no disadvantage in allowing candidates a completely free choice of job. The personal study possessed the lowest validity of any part of the examination. The theory paper added little to the validity of the examination as a whole, and it was considered that this part could well be school based and form part of teachers' assessments, instead of being set and marked externally. 'Craft Planning and Practice could well stand alone as the examination in handicraft. It could then become school based and moderated.'

Many teachers, and examiners, will be startled by these findings. If they are substantiated by further research, and their implications accepted, school handicraft could be freed from the stultifying effect of many of the existing forms of examination.

Home Economics. RENE ADAMS, lecturer in Household Management at Leicester College of Domestic Science, discusses Examination Bulletin No. 9 (H.M.S.O. 3s. 6d.).

The C.S.E. Bulletin No. 9 reports an attempt to break away from the traditional type of examination in Home Economics.

The trial examination has shifted the emphasis from the examination of craft skills and memorised facts to the measurement of the candidates' powers of 'reasoning, assessment and good judgment' over a wide range of topics. This change of approach was necessary if the examination was to be related to the wider concept of Home Economics on which teaching is based nowadays.

It is generally accepted that pupils should be encouraged to 'acquire skill in the organisation and management of time, energy and money' and the assessment of a variety of human problems connected with the welfare of the family and its relation to the community. Many teachers will be stimulated by this *Bulletin* to see fresh possibilities in their work. G.C.E. examinations have controlled the scope of work done in many schools and C.S.E. is enthusiastically received because it encourages a more broadly based course.

The statistical report shows the teachers' assessment of course work to be a 'crucial component of the examination'. The trial examination has shown that much of what is valuable in the teaching of Home Economics does not lend itself to objective assessment.

How does one measure ingenuity, 'initiative or qualities of judgment and good taste'? It is not always possible to state unequivocally what is right and what is wrong. It seems inevitable that the need to produce objective marking schemes will limit the scope of the work. Such an effect clearly militates against the ideas expressed in para. 17 and *Bulletin No. 1*.

What justifications exist for an examination in Home Economics?

- 1. Acceptance as an entrance qualification to some form of further education. A Mode 3 examination devised by a school working closely with a technical college might be useful.
- 2. Employers might attach importance to the possession of a Home Economics qualification in C.S.E.—an unlikely occurrence.
- 3. To emphasise the possibilities of Home Economics as the core of schemes of work designed for the final two years. It is a sad reflection on our teacher training courses that we should resort to an examination to advertise these possibilities.
- 4. To give an incentive to work or status on the time-table. It seems illogical further to stratify a comprehensive system of education by examining a subject in order to supply an incentive or status for adequate teaching time.

Home Economics is one subject in which mixed ability groups can work together. Mode 3 assessment would make this sort of organisation possible while allowing a course to take full account of the neighbourhood and the changing needs and interests of pupils.

[Examination Bulletin No. 10 (Music) and No. 14 (Geography) have also been published. Ed.]

A School Reaction to C.S.E. K. D. BRADSHAW

Mr. K. D. Bradshaw is headmaster of Hartcliffe School, Bristol, a mixed comprehensive school of nearly 2,000 pupils which is likely to become one of the largest in the country. Previously headmaster of a Cheshire secondary school, he has been a deputy head of a London comprehensive.

This is strictly a report. There will be no attempt to offer opinions on the educational effects of examinations, though plainly they seem certain to be probed and questioned even more deeply during the next few years than they have been in the past.

It is a report by one Headmaster based on the experiences and observations of his Heads of Subject Departments, on one single year's examinations in one comprehensive school, in one Advisory Group (a consortium of 15 secondary schools) in one sub-region of one region in the country. After all, in the South-West region alone in 1965 more than 10,000 children from more than 300 secondary schools of every type sat the C.S.E. examination.

AN INTRODUCTION TO EDUCATIONAL PSYCHOLOGY

E. Stones

A book for students of education presenting an Integrated view of educational psychology which embraces the most recent findings in the field as well as the major aspects of previous work. 36s; University Paperback, 18s

CHILD GUIDANCE AND THE SCHOOL

Isabella C. Maclean

A book designed to increase understanding of the problems of the normal and abnormal child, particularly in the forms which student teachers, psychologists, teachers or parents may encounter them. 18s; Paperback, 9s 6d

GEORG KERSCHENSTEINER

His Thought and Its Relevance Today

Diane Simons

An informed account of the modern German system of vocational education, pioneered by Georg [Kerschensteiner. The success of his system and its relevance to Britain's needs, make this book essential reading for anyone interested in education.

25s; Paperback, 12s 6d

PLEASE MISS, CAN I PLAY GOD?

Joan Haggerty

"A direct and enthusiastic account of dramatic work with children in a Junior School in the East End of London . . . Written lightly, directly from experience, and with the kind of honesty one would wish all teachers could bring to their work." *The Guardian* 21s



In one respect this school was unusually fortunate. It had opened in 1960 with an 11-year old entry and therefore the first experience of External Examinations in the life of the school coincided with the introduction of the C.S.E. Examination in 1965.

In fact, of that original 1960 entry of 248, 166 of whom carried on for a fifth year, 135 pupils entered in a total of 727 subject entries. Of these 95 also entered the G.C.E. Examination in a total of 475 subject entries.

In common with many other schools in the area, we could not be unaffected by the fact that for several years an External Examination other than G.C.E. had become firmly established. This was the Secondary School Certificate of the Union of Educational Institutes (U.E.I.). Several Bristol teachers (mostly Heads) had been closely involved in its administration and in the formulation of its syllabuses, while the Certificate had secured a large measure of acceptance by local employers.

There were both strengths and weaknesses in this situation. The principle of teacher-participation was established, but generally it had not penetrated to school level. In many subjects, too, the U.E.I. appeared as a pale reflection of G.C.E. and there was a danger that otherwise valuable 'U.E.I. experience' might be applied to the C.S.E. situation without sufficiently radical re-thinking.

This latter danger was particularly real because of the haste with which highly complicated administrative machinery and detailed planning had to be undertaken to enable C.S.E. to be launched in 1965.

There are some who would have preferred to have travelled more slowly and delayed the launching for a year. Undoubtedly some of the inevitable 'teething troubles' would thereby have been avoided. On balance, however, must teachers seem pleased that the more adventurous course was taken.

The viewpoint of any individual teacher towards the examination will plainly be affected more than anything else by the significance of the contribution he himself was allowed to make both to the formulation of the subject syllabus and to the methods of examining adopted.

How real is teacher-control?

Herein would seem to lie the crux of the issue. How far, in practice, is C.S.E. a teacher-controlled examination? Even in one school the range and variety of experience were considerable. In one or two subjects it was felt that the opportunities offered for effective consultation were negligible. In other subjects an enormous amount of time and trouble was taken to ensure the maximum amount of consultation at three different levels—within the Subject Department of the individual schools, within the Subject Teachers in the Advisory Group, and at Subject Panel Level.

Many differing factors may have accounted for this wide variety of experience. Chief among these was undoubtedly the personality and outlook of the Subject Panel representative. Other important factors were: the extent of the determination of a Subject team within a particular school to represent their views (some schools did not even send representatives to meetings); the practical difficulties which some smaller schools experienced in releasing members of their Staffs to attend meetings; whether or not the Subject Panel representative was a member of Staff of one's own school; the problems that arose through the initial appointment of 'umbrella' representatives (e.g. there was at first only one Subject Panel member for all the Sciences); and underlying all action, the need for speed in order to produce the required syllabuses in accordance with fixed dead-lines.

Sub-consciously, too, views on the extent of consultation would undoubtedly be affected by the extent of personal approval of the resulting syllabuses and examining procedures.

Mode 1

Despite all the difficulties, however, it was remarkable how most Subject Heads were able to choose one of the Mode 1 syllabuses which reasonably represented their attitudes on the proper approach to the education of the average child. In certain cases, their misgivings concerning 'a watereddown G.C.E. syllabus' were allayed by a more imaginative type of question-paper.

In 1965, therefore, in all subjects children were entered for the Mode 1 examination. This was a fairly natural and reasonable consequence of all that had taken place. There had been generally a considerable degree of active participation; the results were reasonably acceptable; and there was a natural desire to put the results to the test. Most teachers prefer to measure their pupils directly with those in other schools and in any event the limited time factor did not easily allow for the production and acceptance of a Mode 2 or 3 paper.

And what of the succeeding twelve months? I find it disturbing that, in my area, after the flurry of thinking and activity prior to the 1965 Examinations there has generally been surprisingly little personal contact in order to evaluate their results, and to extend the fresh approaches made at that time. One explanation is that teachers needed a period of stability free from constant major revisions. On the other hand I have received complaints from some Subject Heads that 1966 question papers were more academic in their approach than in the previous year.

Towards Mode 3

If this serves to increase the momentum towards the Mode 3 procedure this tendency may prove not wholly unfortunate. Already, in this school, Mode 3 papers have been submitted and accepted in four subjects and in several other subjects positive thought and action is taking place to this same end.

In some cases the intention is not necessarily to supersede the Mode 1 paper in the subject but to provide a more suitable challenge and incentive to pupils of below average ability. This, of course, raises an important question of principle. Many believe that C.S.E. should serve the needs of children in the 20th — 50th percentile range. There is undoubtedly an increasing number of teachers who wish to examine children considerably below this ability range through a Mode 3 examination of such a nature that the possibility of a pass at the higher grades may be excluded. All of which may explain why this year (from an original entry of similar size) I have 160 C.S.E. candidates, and why soon from a now-established 14-form entry, I expect to have about 350 candidates in any one vear.

This raises the problems of effective moderation as between different examinations and examining procedures, and arising from that the acceptance of external standards by employers, professional bodies and universities. In reality it is no new problem even though for a long time it has been effectively masked. The evidence mounts of widely differing standards in different subjects of different G.C.E. Boards.

High corelation with G.C.E.

In so far as there is any significance in comparing G.C.E. and C.S.E. results there was, in my school, a high level of corelation.

There was a substantial amount of evidence because in 1965 many children who were entered for G.C.E. were also entered for C.S.E. in the same subjects. The reasons for this are fairly clear—it was our first experience of external examinations and we, in common with other schools, were uncertain about C.S.E. standards.

It was plainly not a practice to be continued on a large scale. In most subjects it is impossible to prepare children suitably for both examinations, while the strain on the individual child is highly undesirable.

Nevertheless, because many schools acted similarly there was a great deal of evidence on which to carry out a comparability research between the two examinations. In the whole of the South-West Region 1,564 children out of 2,316 (67.5%) who gained C.S.E. Grade 1 passes, also obtained a G.C.E. pass; and of 2,677 children who gained a C.S.E. grading lower than Grade 1, 1,055 (39%) secured a G.C.E. pass. Indeed, there were two children, having done no better than a Grade 6 in C.S.E. who gained a subject pass in G.C.E.—damned statistics !

By far the most interesting and significant comment came from the Head of one of my major subject departments, who said, 'I am seriously considering entering all my children only for C.S.E.' a dangerous course of action perhaps so long as the nature and scope of Advanced Level syllabuses continue unreformed.

But if the answer is not to be *no* examinations, then surely it must be *one* examination.

The case for C.S.E.

And the gains ? Briefly they seem to be these.

- 1. The examination provides an incentive and encouragement for children to remain on at school. Already from an entirely working class area 2 out of 3 are staying on for a 5th year. For the majority 1970 is already here.
- 2. This enables the large school to offer tremendous flexibility of choice. Through the multiple pools option system each child can choose its own individual timetable leading to any combination and range of examination success from one C.S.E. subject pass to eight or nine 'O' level passes.
- 3. It has widened the employment possibilities of the average child. For example many apprentice training schemes and secretarial openings are linked with C.S.E. qualifications.
- 4. For some children success at C.S.E. level provides the spur to further achievement. Several, encouraged by their success have stayed on into the Sixth Year, in most cases to take G.C.E. at 'O' level and in one or two exceptional cases to take an 'A' level course.
- 5. The emphasis in many subjects, an emphasis which one hopes will increase, on Course Work as a factor in the final result has made it a fairer, more effective and educationally more desirable instrument of measurement.
- 6. Finally, and out-stripping all other benefits is the fact that many thousands of teachers throughout the country have been encouraged to examine constructively both the content and associated teaching methods, in close relation to the needs and problems of the children they teach.

Book Reviews

A Plea for Creativity

Contrary Imaginations, by Liam Hudson. Methuen (1966), 182 pp., 25s.

The rest of this century seems likely to witness the increasing flexibility in our educational system. Comprehensive reorganisation and non-streaming are aids to this development but one must be thinking about ways of ensuring that we harness all the available intellectual potential of our society. The 'creativity' testing movement in America has grown out of the increasing disillusion with conventional I.Q. testing as a predictor of ultimate intellectual achievement, especially for the so-called creative person considered so valuable for future enlightenment and discovery and invention.

Liam Hudson in this fascinating book surveys the whole topic of 'creativity', examining the American research in detail and making some perceptive criticisms of the notions of 'divergent' and 'convergent' thinking, which some psychologists claim distinguishes the creative from the non-creative. He reports on some of his researches on—'open-ended testing' in this country, and discusses the relationship between objective testing and examinations as predictors.

Dr. Hudson's work has opened up new vistas for experimental enquiry, affecting both curricula planning and assessment. He presents his tentative conclusions in this book to a wider audience than his previous research papers have reached. Any educator who is really concerned with the problems of assessment, examination, testing, and prediction of potential ought to read this book. There are some criticisms which I would like to offer Dr. Hudson. Why has there been no research in girls' and co-educational schools? This might be revealing, too. Also, Dr. Hudson seems to neglect the primary years of schooling where the basic intellectual, social, emotional and cultural challenges are given to the child. Can one discuss creativity effectively without looking at the base of our educational system? Finally, one would like to read some further elaboration of his analysis of 'personal' qualities which he describes so generally in the last chapter of his book. ERIC LINFIELD.

A plea for the Newsom Child

Language and Education, by F. D. Flower. Longmans, Green & Co. (1966), 324 pp., 21s.

Pell-mell, they are all here—cultural analysts, gifted teachers, psycho- and socio-linguists, educational polemicists. Astride that ever-patient old grey mare, English teaching, sit Firth, Quirk and Halliday, Bernstein, Leavis, Hoggart, Barzun (but not Williams), Clegg, Langdon, Uncle Tom Holbrook and all !

The theme of the book is the need for 'contextual English' (which looks strangely like 'living English', and 'English for today'), and the context of this English is almost as all-inclusive as life itself. The reader is conscientiously conducted over this terrain, and up to the misty periphery where contemporary (or, rather, five-year-old) scholarship and literature leave us to our own devices. But who is this reader? Most obviously the teacher of English, at whatever level; except that he is, on this evidence, likely to be beyond the reach of grace, or argument; or, if he stays the gruelling course, is more likely to be overwhelmed at the range of expertise expected of him, than inspired. The book would, however (for it is nothing if not compendious), give a sturdy student-teacher a very complete idea of the recent explosion of thought and writing in his area of study. The author provides a very fair conspectus of recent interest in the social and psychological correlatives of language behaviour, and in the links between language and culture patterns. Yet he recapitulates and encapsulates rather than analyses the ideas he herds together, chapter by chapter. The quotations that illustrate the text often convey more, and more convincingly, than the text itself.

Nevertheless, there can be no doubt of the importance of the brief Mr. Flower has undertaken, although his method of pleading veers between calling on a crowd of sometimes unwilling, and often ambiguous, witnesses, and direct appeals, through our emotions, to our social consciences. And the client for whom this sympathetic and sincere plea is made? The Newsom child, the 'Wilkinson' whose lack of interest in the relief of Mafeking distressed a writer to the Guardian, and Mr. Flower's 'Janice', who thought that Farouk and not Canute tried to keep the tide from his ankles. Whatever its defects, this book is one of the very few sustained attempts, after Newsom, to work towards a rationale and a technique by which education can succeed over the whole of our culture, and not merely serve the aspirations of one part of it. M. F. WELFORD.

Do 'Good' Families Penalise?

The Family, Education and Society, by F. Musgrove. Routledge & Kegan Paul (1966), 156 pp., 21s.

The theme of *The Family*, *Education and Society* is not a new one. It has long been apparent that the family is the most important socialising agency, giving the child his personality base and his notions of values, sentiments and status expectations. That families, or more strictly, parents, perform their functions in different ways, is equally well known. The family's role as a social unit which protects, gives affection, feeds, clothes, houses, educates and entertains is changing as society changes. If our concept of the family is static we will regret the change, as commentators on the contemporary scene have done for centuries.

Professor Musgrove's message is not encouraging. Society has thrown up the nuclear or conjugal family whose isolation and unsociability threatens its very existence and blights the development of the individuals in it. Short of a massive programme of social engineering it may be doubted whether the school can do much to remedy or correct. There is plenty to

MODERN MATHEMATICS FOR SCHOOLS

The outstanding success of Books One and Two has justified the years of research and experiment by the Scottish Mathematics Group. The books have been acclaimed not only throughout Britain but in many countries of the Commonwealth and of Europe.

MODERN MATHEMATICS FOR SCHOOLS is distinctive in many ways, notably

- I in its skilful blending of the new mathematics with the best of traditional methods;
- 2 in the testing of the experimental work with about 7000 pupils in some 60 schools of all types;
- 3 in the readiness of the authors to consider both fundamental and particular problems afresh.

For example, the whole problem of integration was reconsidered and incorporated in the experiment. As a result, the authors are convinced that, while *teaching* should be integrated, it is wholly inappropriate that any *text* should impose a particular scheme. These books therefore supply adequate and suitable material for the teacher to adapt to his individual requirements.

The first seven books provide a course for O level and later books are designed for Additional Mathematics and A level work. The earlier books are being widely used for CSE work and an alternative Book Five (to complete the course for CSE classes) is in preparation.

Book One 9s. Book Two 9s. 6d. Teachers' Editions 12s. 6d.

Book Three 10s. 6d. Teachers' Edition 13s. 6d.

Three-figure Tables for Modern Mathematics 1s. 9d.

Please ask for inspection copies from either of the publishers:

BLACKIE & SON LTD

W. & R. CHAMBERS LTD

BISHOPBRIGGS GLASGOW

II THISTLE STREET EDINBURGH 2

deplore here. In presenting this case, the book never ceases to be lively and provocative. Particularly interesting and challenging is the view that the good family, the facilitating environment which brings academic success, exacts too high a price from the child. To him, society has obligations which are still largely unrecognised. J. E. STEPHENS.

Theory and Practice Unified

An Introduction to Educational Psychology, by E. Stones. A University Paperback Original. Methuen (1966), 424 pp., 18s. (bound edition, 36s.).

Here, at last, is the book we have been waiting for, an introduction to educational psychology which links theory to practice, and which draws on the most advanced thinking and recent scientific developments. Its strength lies in the author's familiarity with recent researches in Europe, the U.S.S.R. and the United States, his ability to fuse the most significant of these into a meaningful whole and present a rationale or theory underpinning modern developments in the schools themselves as concerns the structure of the system, the content and methods of education.

This is a book for teachers as well as for students, well written and well organised. Although dealing with very complex matters, it sets these out clearly, using examples effectively. Each chapter has a clear summary and a very useful descriptive bibliography is included.

Books on educational psychology are often not very helpful. Their contents seem eclectic and sometimes contradictory. They tend to deal with matters remote from the classroom and both students and teachers often wonder what is the point of it all. Indeed the whole FORUM outlook, such as it is, marked a deliberate revolt against the teaching of much of what went for educational psychology in the past, with its chilling fatalism, its crude theories of 'heredity and environment', its failure either to explain the facts about children's development (inconvenient facts were too often ignored) or to act as a scientific basis for the practice of teaching.

To all this, this book marks a sharp contrast. In the first place it accepts that learning is a function of the brain and the higher nervous system, that it is a *process* which takes place through the active involvement of the child in its education and life experiences generally, and that it is profoundly influenced by social factors. The book follows this logical structure, starting with a chapter on 'The Foundations of Learning', which draws heavily on contemporary knowledge of the brain and higher nervous system, and going on to deal with the difficult question of maturation and its relation to development (here the author accepts Vigotsky's view, which has immense implications for teaching, that learning precedes maturation 'creating a zone of potential development').

Further chapters deal with the nature of learning, the conditional reflex (Pavlov), instrumental conditioning (Skinner), the Gestalt view, and with the mechanisms of learning. Mr. Stones is an extremely competent guide through these difficult matters; he is not content merely to present the different, sometimes contradictory, theories—he evaluates them and presents his own view (with which, incidentally, this reviewer found himself consistently in agreement). He then devotes three chapters to consideration of language and its role in mental development ('Learning and Language', 'Learning and Concept Formation', 'Language and Thought').

These chapters form the core of the book; here the work of Luria, Vigotsky, Piaget and others has been drawn on, presenting what is, in fact, a new approach to educational psychology, to human learning and mental development. FORUM has drawn attention to several of these works in previous numbers, and there is no doubt of their significance. There are also very useful chapters on 'Programmed Learning', on 'Examinations and Tests', and on 'Intelligence and Intelligence Testing'.

The great strength of this book is its link with practice, with teaching and the classroom. Mr. Stones is an experienced teacher who has taught in junior and comprehensive schools, though now a lecturer in psychology at Birmingham University. One chapter considers specifically the problems of 'Learning in School', and is concerned with the psychological basis of learning the different subjects; others deal very effectively with backward children and the treatment of backwardness.

Two final chapters, entitled 'The Social Psychology of the School' and 'The Teacher's Task' are full of interest, concerned with many aspects of teaching and classroom organisation in the light of modern psychology, with group work, problems of authority, with streaming and with the ethos and 'atmosphere' of the school.

I cannot rate this book too highly. It will be of great importance in assisting the movement towards non-streaming and in providing a scientific basis for teaching. With this book, it seems to me, educational psychology begins once again to play a positive role in the development of education. Mr. Stones would be the first to give credit where it is due—to the scientists of many countries on whose work he relies. But to Mr. Stones goes the credit of being the first both to digest these ideas intellectually and to present them in a clear and readable manner, at a level acceptable to students and teachers. Students should be encouraged to *buy* this book; teachers might save it up for serious study on their next holiday. BRIAN SIMON.

Failure Unexplained

Down Stream: Failure in the Grammar School, by R. R. Dale and S. Griffith. Routledge and Kegan Paul (1966), 97 pp., 20s.

The volume reports a study of the school and home backgrounds of 39 pupils of one grammar school who showed 'marked academic deterioration' in their first year. It is suggested that deterioration is closely associated with the same cluster of environmental factors associated with such phenomena as early leaving and primary school streaming. But deterioration is defined by the authors solely in terms of streaming—a 'fall' from the A stream to the C stream and so on. Such an arbitrary definition immediately throws doubt on the results, a doubt which is not relieved by the provision of any detailed account of the way in which transfer decisions were made in the school.

The book has other deficiencies. The small number of subjects and the failure to show that the single grammar school is in any way representative make the authors' attempts to present generalised conclusions somewhat suspect. Their attempts to present findings for sub-groups of their subjects are even more questionable. Unfortunately the individual case studies lack a richness which could compensate for this. One wonders why this study was presented in book form at all; the authors have themselves shown that most of the material can be presented in a short article (Educational Research. Feb. 1966. pp. 146-159). But perhaps the most surprising deficiency lies in the conclusion, where possible remedies are suggested. Here the authors seem only able to consider solutions which take the continued existence of the conventional grammar school structure as given. There is only scant reference to comprehensive reorganisation and no mention whatsoever of de-streaming. Surely their own title might have given them a clue !

S. JOHN EGGLESTON.

New Approaches in History of Education

Education, by M. Seaborne. Studio Vista (1966), 203 pp., 208 illus., 45s.

Fénelon on Education, by H. C. Barnard. Cambridge University Press (1966), 152 pp., 30s.

Education and Society in Tudor England, by J. Simon. Cambridge University Press (1966), 452 pp., 70s.

The focus of interest centres on the visual content of Malcolm Seaborne's volume in the Visual History of Modern Britain series edited by Professor Simmons. The 208 photographs include school buildings, portraits, a mediaeval schoolmaster's 'wooden bat for smacking the palm of the hand', pages from manuals and scenes of schooling through the ages in Britain. They are evidence of painstaking research in this neglected field of the visual relics of our educational heritage, and one wonders why the publishers feature the pictures after the text.

The text is a descriptive account, largely from an administrative standpoint, of the development of educational provision with many local examples, and does not attempt to probe underlying pressures. Secondary school and college of education libraries should find this visual presentation a popular supplement.

College tutors and students embarking on the B.Ed. must welcome the decision of Cambridge Syndics to replace the pre-war *Landmarks* with the new *Texts* and Studies in Education series, so ably launched with Professor Barnard's presentation of Fénelon. In a 43-page introduction that is lively and informative Professor Barnard sets the historical background to his selection from Fénelon's writings on education. These comprise *The Education of Girls*, much of which is concerned with general theories of early upbringing and education not exclusively relevant to girls, Advice to a Lady of Quality concerning the Education of her Daughter, two extracts from Télémaque—on the ideal woman and on popular education—the Memorandum on the Education of the Duc de Bourgogne and Programmes of Studies for the Duc de Bourgogne.

Except perhaps for the *Télémaque* extracts this is the first authentic, unbowdlerised English translation of Fénelon's educational essays. These are interesting not only for the educational thought of a late seventeenth century French catholic, but also for the contemporary criticism of aristocratic society and the light shed on attitudes to women in that society.

Over recent years a considerable volume of specialist research has been published relevant to educational developments in fifteenth and sixteenth century England that has called in question the findings of A. F. Leach and interpretations that continue to feature in standard histories of education; much of it is also relevant to a reappraisal of developments in education following the industrial revolution. In her well documented and scholarly study, *Education and Society in Tudor England*, Joan Simon not only draws this scattered research together but also makes a formidable contribution to a new understanding of the history of English education—and incidentally sheds fresh light on Tudor society.

The fifteenth century now appears as 'an age of educational expansion rather than advance', and in the sixteenth 'there began to emerge a system of education in the modern sense in place of forms of upbringing designed to fit men for different estates of society'; for 'education was becoming the key to advancement in most fields.'

When Renaissance humanism and the Reformation are seen as a related continuum furthering educational advance, and the early sixteenth century recognised as 'an age of economic and social as well as political and religious change', the intense official and local concern for educational expansion is readily explained. In place of the oft-repeated legend of Reformation destruction, Mrs. Simon shows that 'the development of a system of grammar schools catering for lay needs emerges clearly as the new factor in the situation.'

Within the Tudor era the reign of Edward VI is here reinstated 'as a period of educational advance, (and) that of Elizabeth falls into place as a predominantly conservative age' during which processes begun in her father's reign were continued and consolidated.

It becomes clear that by the end of the Tudor period teaching standards had risen, the content of education had been reformulated and the curriculum expanded in accordance with humanist and puritan precepts combined with socio-economic pressures; and, though the really poor were still largely excluded, educational provision had been considerably extended. N. WHITBREAD. Larger than Life

D. C. MEASHAM

'Larger than Life is an unorthodox introduction to literature; the Hero is its theme.' With this simple statement the author introduces one of the most exciting and exacting textbooks to be published in recent years.

Beginning with a shrewd look at ancient heroes, he notes Prometheus, the benefactor, and David, the underdog, as the two most durable examples. It goes on to present literature, particularly recent British and American literature, in the context of the world that has produced it; relating it, at the same time, to what has gone before. Sufficient material is given (together with suggestions for further reading) for the student to make up his mind on many important issues. The book is designed for use in technical colleges; for General English courses in colleges of education; for senior students still at school. **8s 6d**

The Language of Ideas 1 & 2 ALAN HARRIS and JACK CROSS

Anyone who teaches English or Liberal studies to pupils over the age of 13 will find exciting material in these two books.

The authors stimulate discussion, writing and reading by providing carefully developed information of vital importance in modern life.

Design an town planning, Psychology, Ethics, Politics and Logic are among the subjects introduced in clear simple language.

These revolutionary books consist of sections of written material followed by open — ended questions to promote class discussion, and by suggestions for further work, reading and research. Book 1 coming 7th Nov. Book 2 Feb 1967. Illustrated 6s 9d non net each

Nucleus Books

A new series aimed at VIth forms (particularly the science VIth) and technical colleges. The Plague by Albert Camus
Introduced by John Cruickshank
Introduced by John Cruickshank
Introduced by John Wain
98 6d non net
98 6d non net

To be followed in 1967 by The Scientific Outlook by Bertrand Russell. Weekend in Dinlock by Clancy Sigal. The Scientific Attitude by C. H. Waddington.

Hutchinson EDUCATIONAL LTD.

178-202 Great Portland Street, London W.1

Printed by Blackfriars Press Ltd., Smith-Dorrien Road, Leicester, and published by PSW (Educational) Publications at 71 Clarendon Park Road, Leicester