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NEW TRENDS IN THE SCHOOLS

The reorganisation of secondary education, as this journal has frequently stressed, is more than a simple organisational change. It must necessarily act as a stimulus to a fundamental rethinking of aims and purposes, and so of the inner organisation of the school, the content and methods of education.

There are encouraging signs that this re-thinking is beginning, and some of it is reflected in this number. The first Pilot Course arising out of the Newsom report, run at Goldsmiths' College, is reported on by its organising tutor. This involved a re-appraisal of content and methods by a group of very experienced teachers; nor is there any reason to suppose that the conclusions arrived at are relevant only to the 'average and below-average child'. It is encouraging to know that these conclusions, including the need to develop non-streaming at the secondary stage and to make a new approach towards the integration of the curriculum, are being brought into practice in many of the schools whose heads, deputies, etc., attended this course.

Among the methods being proposed is that of team teaching, a technique that has already been discussed in FORUM and which itself involves

a new look at the theory and practice of teaching and school organisation. An article describing experiences at Swinton comprehensive school is included in this number; in this connection also the Goldsmiths' course appears as a pioneer, in that students at this College are to operate as teams working with teams of teachers in local schools. At least one University Education Department has also carried through an experiment in this method. All this indicates that new developments are taking place which will help to break down the rigidity of school organisation in the past.

A relatively recent technique of growing importance for education is television. We include in this number a symposium on the uses of this medium from various angles—that of the producer, the child and the teacher.

In recent months Bristol has emerged as a pioneer authority in the reorganisation of its schools. Developments there were the subject of much inspired propaganda earlier in the year. The article by a teacher who has spent many years in one of the Bristol comprehensive schools will, it is hoped, do something to make clear the real nature of these changes.

The school and social change

CHARITY JAMES

Mrs. James is principal lecturer in secondary education, Goldsmith's College, and organiser of specialised courses in education. As such she was chiefly responsible for organising a pilot course for experienced teachers, of a term's duration, described below. Similar courses will be arranged in future by various Colleges and Institutes of Education.

Einstein, we are told, never ceased to be surprised by the obvious. In a period of radical scientific enquiry and technological change we should look equally to the quality of our educational questions. Secondary education today is under pressure from consumers (namely parents and employers, not adolescents). To them educational aims are obvious

enough: they want a larger supply of familiar preparations, labelled 'A' or 'O' or even 'RRR'.

Meanwhile as teachers we have accepted a determinist framework of assumptions within which good answers are possible, but not good questions. Some of our questions are poor because they accept false dilemmas, as when we declare for or against

examinations as if no other kind of appraisal were conceivable. Others, especially those emphasising educational organisation to the exclusion of content, are too narrow. Most damaging are those that beg other more fundamental questions. We grow increasingly realistic in preparing children for adult life but forget to prepare them to improve it; or we make admirable proposals for better subject teaching, and fail to question the design of the whole curriculum. The predicament of the Newsom Committee was significant. Required to answer an ill-conceived question, it rightly attacked one underlying assumption, the fixed pool of ability. But two others lie unchallenged, that our criteria for estimating 'ability' are adequate and the education of our 'more able' children satisfactory. Hence in the teeth of studies in creativity over the past decade, which indicate the need to encourage problem-solving behaviour, we continue to grade children by their capacity to perform conventional tasks (future ploys for computers) and confine plans for an outgoing, problem-solving, education to those we designate as failures.

It is clearly the professional duty of teachers to seek creative alternatives to outworn responses, and to ask questions more fundamental than those which engage us today. For this task two conditions are necessary. Experienced teachers must have time and opportunity to withdraw from school to confer at length on educational policy, and they must be able to call on the co-operation of their colleagues in Colleges and Institutes of Education. This the Department of Education and Science has helped to promote, as an outcome of the Newsom Report, by sponsoring one-term full-time courses for teachers which provide an unprecedented opportunity for such a fundamental reappraisal.

A Pilot Course

The first Pilot Course, for 27 experienced teachers, took place at Goldsmiths' last spring, and I have been asked to record some personal impressions of it. No one would wish to claim that it was a success, for that has a retrospective finality, but those who took part believe that it was a fruitful beginning. Out of it have arisen new proposals already being tried out in schools. This immediate result is due to the foresight of certain L.E.As. — Essex and Middlesex together notably seconded seven leading head teachers — and of the schools which released heads, deputies and senior staff well able to advise their colleagues on their return. On our side, Goldsmiths' gladly offered its facilities, as well as contacts with many schools, colleges and members of allied professions.

From the outset, courses were planned as working

conferences, each of which would produce an informal report for the guidance of its successors and useful to colleagues and authorities. Planning the first plunge was not easy. Candidates had made it clear to the warden and myself that an exegesis of current educational proposals would not do at all. Many had echoed the head teacher who said, 'I welcome the Newsom Report. Much of it could have been written about my school. But I am still not satisfied'. Our belief that we needed an international perspective was confirmed, and with it our gratitude to Professor G. D. Phillips of Boston University, who had offered to spend his sabbatical leave acting as co-tutor. By providing a cosmonaut's overview of our problems, he greatly helped us to find solutions appropriate to English needs.

Problem-solving

Dedicated ourselves to problem-solving in education, we offered our teacher colleagues the most fundamental and urgent problem we could formulate. What is the role of the school in a period of rapid social and cultural change? Apart from a brief survey of theories of socio-cultural change the first fortnight was freed from lectures so that members could discuss this problem, in small or large groups as they preferred. No process could have been more exacting, but as we ranged over familiar areas of concern—streaming, middle-class *mores*, working-class disadvantages, relations with parents, problems of fourth year leavers—we began to place them in the context of larger questions. Recent studies show little awareness of the gathering momentum of change. Crowther's demographic information is invaluable, but a need for flexibility among employees is hardly the full democratic answer. Should not schools do more to mediate change? Is induction into yesterday's certainties appropriate today? How can we help pupils to break through our latter-day passivity, so that as adults they may transform mere change into social progress?

The answer must lie in a comprehensive reappraisal of the curriculum and relationships of the secondary school. We proceeded to a strenuous four-week study of two interwoven themes, an enquiry into different kinds of curriculum (based on subjects, interests, topics, themes) and lectures by specialists describing the character, scope and limitations of their disciplines and discussing their potential contribution to the curriculum.

This was the basic design of the first six weeks, but there were other activities. Most secondary teachers are deprived of the creative arts from their early teens, yet how can one understand their value for children except by experiencing them for oneself?

Every member took part in a weekly 'art practical', and most found them a source of great personal enjoyment. So also, I think, was the series of lectures by members of other professions concerned, like ourselves, with the future, such as architects, planners, designers. Then there were lectures by allies in the field of mental health, from one of which sprang a request for regular group work with a distinguished social psychiatrist. All these, together with our continuing discussions and occasional visits to schools, kept us sane and contributed to a growing feeling of confidence.

During the final five weeks, which had not been time-tabled at all, the majority chose to continue work on curricular problems. But two heads undertook a survey of methods of appraising children. This period of consultation, consolidation and further study seemed to us all to be essential.

The immediate outcome of the conference was a sixty-page report, written co-operatively at excessive speed, of which the following is a brief summary.

An Education Bill of Rights for Adolescents

1. 'Man makes and remakes his culture'. Those not equipped in schools to share in this process are in a new sense disfranchised. Our legal safeguards and the vote do not suffice today. The school owes it to all adolescents to introduce them to the new physical sciences, the developing social and behavioural sciences, the new arts. There is a danger of a new serfhood as the development of an élite culture gathers momentum.

2. Everyone today moves into an unimaginably changing future. Benevolent paternalism, inside or outside school, is irrelevant to young people's needs today, when each has to learn to make wise decisions for himself as well as contributing to a social consensus. This requires mental health based on self-knowledge and a capacity to identify with others without rigid conformity; an intelligible integrated view of the world; and rich feelings towards it.

3. The school can create this life for children only by giving them experience of it. If it is to promote change it must change itself.

4. Today's fragmented time-table presents the pupil with an experience of reality as incoherent as a political map. We should re-create the school day, bearing in mind the following considerations:

- a. To understand the significance and application of key concepts of our culture is far more important than acquiring factual information.
 - b. Much of the information accorded to adolescents in school is quite irrelevant to their needs and interests.
 - c. They welcome the opportunity to examine problems that deserve attention. These must not be simply topics: at this age they need to study topics in the context of a major theme.
 - d. A problem-solving approach is vital. By using the social and natural sciences, mathematics and language, the arts in co-operative enquiries, adolescents will learn to appreciate them.
 - e. Every adolescent has a right to share in these integrated studies. They are not a sop for the 4th or 5th year 'failures', but should occupy some half of the day from the first year onwards.
5. Selection and streaming according to meagre kinds of assessment gives social experience that is anti-social. It denies adolescents the opportunity to find themselves in relation to a wide diversity of persons. It also wastes talent, since many accept and fulfil the pessimistic predictions of adults.
6. Far more research is needed into the interests, personality, social and intellectual development of our adolescents. At present we shall work largely in the dark in planning a five-year cumulative curriculum.
7. When we have adequate means of appraising children and schools, the examination will be seen to be as outmoded as the blunderbuss. New techniques must be developed to assess powers of problem-solving, decision-making and creativity. Mode 3 CSE offers hope in this direction, if not rigidly interpreted.
8. The changing needs of adolescents today demand new roles and hence new skills of teachers. This should influence teacher education in future. There is also a need for far more in-service courses, including policy-making conferences such as this Pilot Course.

Results and Perspectives

While it will take time for the long-term influence of the course to emerge, some effects are already evident. Nearly all the schools involved are planning some modifications. At least eleven will start off their first-year entry this autumn in unstreamed groups, spending the morning with teams of teachers on a year-long theme, the afternoons being devoted to subjects which require progressive development or where integration would be forced and unnatural. Plans vary greatly, as they should, but all assume flexible group work and many turn on the theme of man's increasing power to understand and control his environment—an encouraging start to a child's secondary education.

Team Teaching

D. P. CHURCH, H. I. GARRITY and G. JAMES

This article gives an assessment of a new technique of teaching at Swinton comprehensive school, Yorkshire. Mr. Church is head of the geography department in the school, Mr. James head of the history department, while Miss Garrity is senior mistress; these formed the 'team' whose experiences are described.

The origin and initial development of team teaching at Swinton have been outlined in an earlier article by Mr. Hugh Cunningham (FORUM, Spring 1964: vol. VI; no. 2). At this time the scheme was limited to three periods per week with the fourth form leavers. It was expanded last September to include two Geography and two History teachers who were to draw up a syllabus entitled Modern Studies to be followed by those fourth form pupils leaving at the age of 15, numbering 120 in all. The four teachers were to work as a team, an idea recommended in the Newsom Report, and were allocated five periods a week comprising a double period on a Tuesday and the whole of Thursday afternoon of three periods when visits and talks were arranged with no inconvenience to any other part of the school or staff. It was hoped that the effect of such an approach would give an increased sense of purpose to the fourth year while also experiencing the effect of a number of adults dealing with topics from an individual and differing approach.

Swinton is a heavy industrial and mining area in South Yorkshire and the aim of the course was to make the children more aware of their environment and better fitted to take their place as critical and discriminating citizens of that community after leaving school, as well as to give them advice and assistance in finding employment. Pupils are increasingly concerned about leaving school and finding

work and therefore we sought to make use of that interest to direct it towards an appreciation of the need for knowledge about our society and the factors that have shaped and are shaping it. The syllabus was divided into three programmes, each approximating to a term's work. The first part dealt with international problems, the second with national affairs, and the local area was considered last mainly through surveys, visits, and talks by outside speakers. Indeed, the purpose was to make their studies meaningful. Each section of the syllabus was then broken down into topics and one member of the team was to be responsible for each topic.

The organisation of a typical week's work is indicated by the diagram opposite.

The background work is aimed at facilitating the key lesson so that the teacher responsible for this can assume his audience possesses some basic factual knowledge concerning the topic to be discussed. For the key lesson itself the whole group is gathered together for common instruction which usually takes the form of a lecturette but has included films, talks by visiting speakers, group discussions, practical work and conferences. With a group as large as 120 the obvious difficulty is to pitch the key lesson at the appropriate level and we have usually provided beforehand a summary and questionnaire for each pupil. Under the American system the teachers responsible for the key lessons

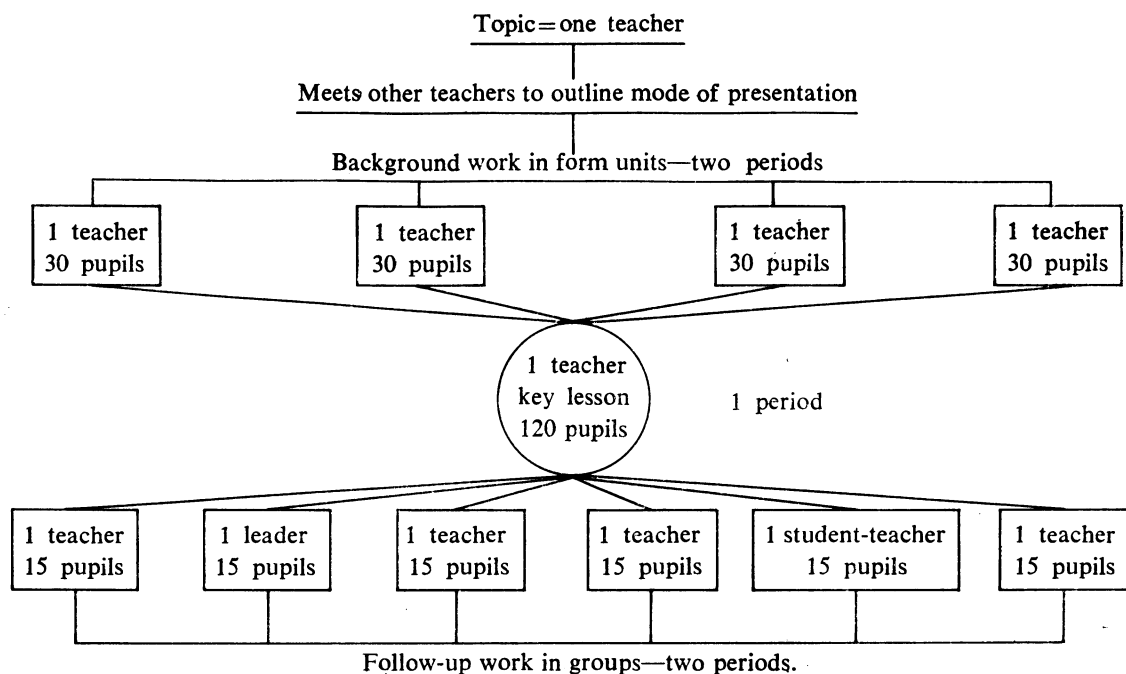
Continued from page 5

Incidentally, Goldsmiths' is to profit by a new co-operation with nearby schools working on such thematic studies. These are accepting second-year students who will spend their second practice working as teams with teams of teachers. This should provide invaluable experience of satisfactory teaching, and we hope that, by planning beforehand with their specialist tutors, students may make a useful contribution to study of the school's chosen theme.

A series of pilot courses has been planned for this year when the visiting professor will be an American from the South, an expert in appraisal

and integration. The autumn course is concerned especially with problems of appraisal and self-appraisal of children and continuing study of the curriculum will be biased in this direction. In the spring, we turn to problems of social handicap and the school's role in social integration. In the summer, we look at the changing balance of leisure and work and its implications for the curriculum. We hope that these courses will be supportive, for the themes are those requested by our colleagues in schools.

We invite new requests for the future.



take no active part in the follow-up work though they will probably have planned it. We too feel that the member of staff who gives the key lesson should not be expected to participate in the follow-up work immediately afterwards but merely be available for consultation. Furthermore it is essential that provision is made in the timetable when the team of teachers are actually given a free period at the same time to discuss the week's work.

In America team teaching has been introduced in the main into schools specifically designed and equipped for the purpose with several rooms for group discussion together with reading, viewing, and listening rooms for students and a special auditorium for the delivery of the key lesson. At Swinton we have had to contend with many practical difficulties regarding accommodation. For the key lesson we have had to use the school hall, which also functions as a dining room and, in wet weather, as a gymnasium, apart from providing the main thoroughfare between classrooms at the change of lessons. We have experienced considerable difficulty in fitting 120 into the only room available for projection, which happens to be a science laboratory, and have been allocated only three rooms to accommodate at least four groups for follow-up work. To ensure the complete success of the key lesson a

variety of teaching aids, particularly audio-visual equipment, are needed which we cannot afford to buy. Any widespread introduction of team teaching into this country must involve a complete reappraisal of existing and planned buildings and equipment as emphasised in *Half Our Future*. Nevertheless, the success we feel we have achieved in the face of these difficulties has more than justified what, looking back, seems to have been a rash and risky venture.

The vital significance of our experiment in team teaching at Swinton stems from the fact that we have been dealing with the lower streams in the fourth year. These are traditionally the 'difficult' forms so often regarded as unteachable and in which disciplinary problems abound in consequence. These are also the children who by 1970 will be staying on an extra year at school when staffing problems will become even more complicated; it seems clear that if they are to gain any benefit from this then the curricula of many schools will have to be reorganised. Here team teaching has a vital contribution to make.

In dealing with these less able children the first essentials are to capture their interest and stimulate their imagination. This we achieved initially by a series of lively key lessons already listed above. The

children knew they could expect someone or something different to interest them each week, and this varied fare in itself stimulated their curiosity and overcame the dangers of formality in teaching. At the same time, through visits, local surveys and outside speakers, we were able to emphasise contacts with the public so that the children realised the relevance of their course of study to their future life outside school, a relevance seen by other pupils in terms of G.E.C. passes. Perhaps the greatest virtue of team teaching is its flexibility and variety of approach enabling a far more comprehensive range of activity to be organised both in and outside school than would ever be possible under a conventional time table.

Disciplinary problems have been few and far between. Undoubtedly this is the result of much greater contact and consequently much better mutual understanding between staff and students achieved in follow-up work, particularly during group discussions outside the confines of the classroom. Moreover, because the whole venture has been a group affair necessitating close co-operation between everyone concerned, the pupils have felt that it has been up to them to respond to the best of their ability.

Discipline also reflects to some extent the standard of teaching and we feel that through team teaching this has improved on several counts. Each member of the team has dealt with those topics in which he is most keenly interested and adept at exploiting in the classroom, imparting much of his enthusiasm to his audience in the process. With a team of four each teacher is given several weeks' respite between each key lesson he delivers, thus allowing ample time for thorough preparation with some reduction of the teaching load. Moreover, as each key lesson is delivered in the presence of three critical and appraising colleagues it tends to be delivered as a polished 'demonstration' lesson rather akin to that prepared by a student teacher when he knows his tutor will be visiting him. In these three ways team teaching gets the best out of those members of staff participating in it, while all the children, not just one form, get the benefit of a good lesson. It certainly reduces the number of mediocre lessons taught and spreads the more successful ones to more children.

The standard of work achieved by many of the children, some of whom had spent the previous three years in the school's Remedial Department, has been quite remarkable. We have attempted to stimulate them to think for themselves, to form and justify opinions, and to pursue independently lines of study which particularly interest them. In this latter aspect of follow-up work carefully planned

programming should play an important part. Because the majority of children have considerable difficulty in setting out their thoughts in written answers we have encouraged them to express their emotions through discussion and practical work employing pictograms, posters, graphs, maps and models. Much of this type of work has been in close co-operation with the Art Department. Indeed the general interest shown by other Departments in our experiment, including a series of lessons on industrial accidents by the P.E. master, has encouraged us to think of expanding the team.

It is desirable that during the follow-up work the groups should be as small as possible. We have attempted to accomplish this by appointing group leaders from amongst the children themselves and by making use of student teachers on teaching practice. It seems to us that this is a more profitable way of absorbing student teachers into a school and a more efficient way of training them. Similarly by participating in team teaching, a young teacher taking up his first post is able to work alongside his more experienced colleagues, to discuss with them the preparation of the week's work, to watch them in action during the key lesson and to assist them in the follow-up work. In doing this the new teacher gains in confidence more rapidly and makes far less initial mistakes than under the normal circumstances of conventional classroom teaching.

When rebuked for not knowing the name of a famous European river, a sixth form pupil studying 'A' level History, replied that she was not taking 'A' level Geography. This remark reflects an unfortunate attitude all too common amongst teachers and students alike concerning the rigid divisions between subjects. Although within the group of teachers taking the course there is a certain degree of specialisation, we have in one year succeeded at least in blurring the division between our two subjects and on this score alone believe that there is a strong case for introducing team teaching to other age and ability groups within the school. Indeed, during the next academic year this technique will be extended to cultural lessons for the sixth form. There are, for instance, many educationalists and teachers who advocate the extension of the primary school system of instructional organisation, whereby one teacher takes one form for all subjects, into the first two years of secondary schools. This, it is argued, would reduce the arbitrary and artificial divisions between subjects, establish the essential unity of learning and knowledge and remove the time wasting duplication characteristic of a traditional curriculum. We feel the same aims could be achieved far more efficiently by the introduction of team teaching on a wide scale.

Forum Looks at School Television

The various techniques associated with television are clearly going to be of increasing importance for education. In this symposium the nature and potentialities of television are approached from three different angles.

The first article is concerned with the planning, production and assessment of school television programmes of the kind broadcast by the two national channels. The authors, Messrs. Warren and Lewis, are Assistant Head of School Broadcasting and Schools Liaison Officer, Rediffusion Television, respectively—Mr. Warren has himself produced many types of school programmes, mainly in the fields of science and drama. They make the point that, in the production of school programmes, there are more points in common between BBC and ITV than there are differences, but that the system described is that followed by Rediffusion Television, one of the three independent companies which between them produce the bulk of the ITV school programmes networked throughout the country.

The second article, by Mr. E. Harvey, of the FORUM editorial board, is concerned with 'consumer response'—the attitude of primary school children to school television; this raises in particular the question of the integration of TV programmes with the work of schools.

The third article, by Mr. C. D. Butler, of the University of Exeter Institute of Education, describes vividly a pioneer experiment in utilising TV for the inservice training of teachers scattered over a wide area, under the full control of the teachers themselves. This experiment, therefore, differed from the normal schools TV in that it was provided by teachers for themselves and their colleagues, rather than by the production companies or BBC for children. It points the way to possible new uses of television, particularly when more channels over local areas become available.

School Television Programmes

C. WARREN and P. M. LEWIS

The making of a school television series goes through, in sequence, a number of stages as outlined in the rest of this article. At a given moment, however, a producer is involved in all three processes: he is reading reports from schools on the early programmes in the current series while making the later programmes in the same series; he is planning the next series, information about which must reach schools before the start of the next term; and he must also be concerned with the next year's plans, since the Annual Programme Booklet is published six months before the start of the school year to enable schools to plan their own timetables.

The work of most teachers proceeds at several levels in much the same way. What is peculiar about school television are just those production-line features which characterise all television, and which, like an endless belt, exert a continuous pressure to meet deadlines up to the final deadline—the videotape recording time at the end of which the programme must be recorded ready for transmission. After that, there is the next programme, a new series, another year. All the other aids on which the teacher can call are fixed quantities. Television alone has the same transitory, yet continuously developing nature as the teacher's own lessons. Film, film-strips,

courses of programmed learning, records, tapes . . . all are productions meant to last, able to be pre-viewed, stopped and started in the lesson, and later repeated again and again. Each of these aids has its uses, and its special advantages and disadvantages.

In television there happens to be a means of bringing to a (potentially) very large audience at one time visual material of an immediate and compelling kind at no cost to schools except what may be involved in the installation of a set and in the purchase of ancillary literature. The question is, 'is such a medium worth using to help the teacher, given its own special advantages and disadvantages?' The answer is surely 'yes', but it does sometimes seem that teachers are expecting the wrong things of school television, asking in effect that it should conform to the demands they make of other aids.

It is unavoidable in this kind of television that a programme may appear on the screen without the teacher having complete knowledge of it in advance, since programme notes have to be printed long before all the programmes in a series are made. The teacher sees this as introducing an uncontrolled element into his lesson—not at all what he expects of an 'aid', since most aids are 'subservient' to him. Television seems to him a sort of powerful, uncontrollable genie, and it takes boldness to release it from its bottle, and opportunism to deal with it once released. While sympathising with the in-

experienced teacher in this situation, we would argue that the advantages of this injection of spontaneity outweigh the disadvantages.

Planning

Assessment of previous series and planning of new ones are obviously closely related. Decisions on programme policy are made by the Schools Committee of the Independent Television Authority which oversees the ITV field as a whole. An important factor is, of course, the planning of the BBC, similarly advised by its School Broadcasting Council. Exchange of programme plans with subsequent discussion ensures that there is no unnecessary duplication of effort in the same field, and that as far as possible clash of programmes for the same age-range at the same time is avoided.

School Broadcasting Sections, like other sections, have to keep within their allotted budget and time allowance, so naturally there is a queue of programme proposals waiting to fill the available number of 'slots'. Advisers are faced with the problem of reconciling the claims of successful series already in existence with the need to experiment in new fields or meet new demands from schools. Despite what has been said about the transitory quality of programmes, it is possible to repeat some productions, for instance drama productions, and consideration has therefore to be given to what is available to repeat. Series are repeated only after a year 'fallow' so that pupils in classes with a wide age-spread (small primary schools, remedial departments, or sixth forms) do not see the same programmes two years running.

Of the demands from schools, probably the most insistent is that for more series for primary schools. About eighteen months ago the log-jam began to move and now primary schools are registering in hundreds. Science, mathematics, geography and history are likely to continue to form the bulk of the provision for top juniors, while for lower juniors and infants programmes of the type known as 'miscellany' try to offer stimulus to learning by many different approaches matching the ways in which children's awareness develops at this level.

In order to consider secondary school provision, it is perhaps first necessary to attempt a clarification of the phrases 'enrichment' and 'direct teaching' . . . phrases often used in discussions of educational television and capable of being taken in several different ways. We would suggest that if these terms are to be used at all they refer, not to something objective in a programme, but to the use to which the programme is put by a teacher. After all, it is a sad confession of failure if all education is not en-

richment, and perhaps 'teaching' should be redefined to stand for authority of the teacher in a classroom. As far as television is concerned, one teacher might organise a whole term's work round a series which is of marginal relevance to another; or a class could be set to watch a series 'because they might get something out of it, although it is not really in the syllabus'. This is not to deny, of course, that programmes have their aims and that these may range from conveying an atmosphere or communicating an attitude to imparting a definite set of facts or skills.

The question then to ask of secondary school programmes is 'how far do teachers find they coincide with their schemes of work?' With eight different GCE Boards and now with fourteen different regional CSE Boards it would be hard, if not impossible, to devise a syllabus-linked series that satisfied everyone. So up till now it is not surprising that most use of television has been made by lower streams in secondary schools who have greater freedom in devising syllabuses of their own.

The approach of many school television series at this level has been that of synthesising from different subject areas, and by use of contemporary film and examples to show the relevance of a topic in modern life.

This approach, spreading upwards from primary education, has begun to have its effect on secondary syllabuses in the same decade in which school television has been with us. Thus, ironically, school television in a number of fields has received the ultimate canonization of finding those fields made the subject of examination in the CSE. At more academic levels the spread of new methods (in mathematics and science particularly) has been helped by television in series which have as much to offer to the teacher as to the pupils.

Production

After the proposal for a series has been authorised by the appropriate advisory bodies, the brief is handed to the production team. In Rediffusion, this consists of a director working with an 'education officer'—an ex-teacher on the staff of the Schools section. (Roughly speaking, in the BBC these two roles are combined in one person, and for convenience in this article we have used the word 'producer' to describe the area of joint responsibility.) With the help of a script editor, a script-writer is contracted and briefed, and as the programmes take firmer shape the task of the education officer, from having been concerned with educational planning and research, becomes mainly one of assessment of the series as it is received in

schools. Since these operations are dealt with elsewhere in the article, what follows is, in effect, a description of the director's task.

The script will have reached rehearsal form after the director has done any outdoor filming necessary and worked out his studio plan with the designer allotted to him. Varying lengths of time away from the studio are spent in rehearsal of the actors and/or presenter so that the lines are learned and the script timed so as to be within the allotted running time. This includes the moves of actors and camera and the time taken for film inserts. Around four hours then follow in the studio of 'camera rehearsal' in which time the production is 'married' by the director to the technical requirements of the studio, and in this time the studio technicians in charge of cameras, lighting, sound, make-up, etc., become familiar with the script. This familiarity is achieved by successive runs through the script, at first slowly so that each shot can be lined up to the director's satisfaction, then faster till in the final run-through a fluency is achieved which (it is hoped) is only improved on in the actual 'take'. The 'take' consists of recording the continuous performance without a break on videotape. At the end of the time allotted for the recording, the set is struck and the studio may be prepared immediately for the next production scheduled for that studio—a play, light entertainment or whatever it might be. For the production that has just been recorded there can be no going back and, except in the rare case of a serious mistake, no editing. Thus it is that, in common with other kinds of television, the acceptance and subsequent transmission of, say, a presenter's slight stumble is preferred to the alternative of re-recording—that is, so long as an educational point has not been lost. In this, school television differs from educational film, in which, with fundamentally different production techniques and different prospects for the production (two years on loan circuit) no such slips could be tolerated.

A visual medium

The producer must above all other things remember that he is producing television programmes in which it is possible to bring to his audience all the visual aids available, that is film, captions, photographs, models, a live presenter, demonstrations, dramatisations and experiments. The content of each individual programme will determine how the producer uses these facilities, but he must exploit them to the full if he is to produce a good television programme, because television is fundamentally a visual medium.

In making the programme, the producer will find

that he is having to keep in the forefront of his mind the type of audience for which the programmes are intended. He must constantly be asking himself whether he is making the best use of the medium, using the visual possibilities to the full in order to tell a clear, logical story. At the same time the producer must be certain when using a production effect that in doing so he is adding to the clarity of the message and not simply satisfying his own aesthetic needs. It is fundamental that the techniques used should be subordinate to the clarity of transmission of the subject matter.

Viewing conditions

It is also very important for the producer to remember the viewing conditions. Programmes for home viewing are produced bearing in mind that there will be from one to four persons watching a screen at a distance of about eight or ten feet, and that the conditions of viewing are reasonably good. But in a classroom the conditions and demands are different. The programmes go out during the day-time, and the problems of dimming classroom light are not always overcome; there are usually thirty to forty children in a classroom, so that the child at the back has not such a good chance as the child at the front; thirdly, it is a fair chance that some of the children would rather be doing something else.

Above all, the pace and development of a school television programme has a special character. There can be no immediate feedback from the audience in the course of the programme, so the producer must gauge the average response and 'programme' his material to suit the average pace, signposting the stages clearly by visual as well as verbal means, and inserting questions and pauses so that the viewing class may participate in the programme. If one always proceeded from A to Z in strictly 'linear' fashion, the most and least able might be lost. So programmes, especially those aimed at primary schools where many classes are unstreamed, must contain moments at which the reluctant can be won back to the subject, and the interest of the quicker pupils stimulated. Those whom the logic of the development has failed to hold can yet learn something from the programme, or, perhaps more important be stimulated to find out something afterwards.

Children will often say of a school television programme that they liked 'this bit' or 'that bit'. It certainly makes sense to say this of a programme, but it sounds odd to say it of a lesson. Many teachers, however, although they realise that what occupies the screen for twenty minutes or so does not have much resemblance to their own classroom

activity during a similar period, do not go on to draw the conclusion that the programme was never meant to be a lesson, indeed cannot be one.

Q: Can TV teach children? A: No, but it can help them learn is not in the present climate of thought mere playing with words.

Assessment

From what has been said so far of the very varied use made in schools of television programmes it can readily be imagined how hard it is to measure the success of these programmes. Yet it is difficult to see what tests one could apply to isolate and identify what television has contributed in a situation where so much depends on the teacher's follow-up, and the relations between the teacher and the class. Some depth studies have been attempted, but it is safe to say that much more time and money could profitably be spent on research. This is something which might well come from the many small closed circuit TV systems which are beginning to get under way.

Given the time and resources at present available to the national networks, their main efforts are directed towards providing the producer with a running guide on audience reaction. Visits to schools, reports sent in by teachers, educational meetings and conferences, as well as unsolicited letters are the main channels for feedback. In Rediffusion Television, education officers and other members of the school section visit schools to watch programmes being received in class and to talk to teachers and children. In addition viewing schools are invited to report weekly on reply-paid cards. The response to this invitation is such that for primary series one can pick panels which are a good reflection of the whole area. Response from secondary schools is less satisfactory however and one is usually glad to accept every offer to report. Similar systems operate in the rest of the network, and the cards coming in each week after the transmission are seen by the production team.

These reports make possible what is a great advantage in school television—continuous adaptation in the course of a series in response to the comments of schools. There is also the longer range adaptation by which the techniques proved successful in one series can be used in another. Taken together, the two possibilities of adjustment do seem to be successful in ensuring the survival of the better and more acceptable series.

One final point: it is notorious that teachers are far from unanimous on teaching methods, and this becomes only too clear as one reads the report cards on a programme. It is fair to say that currently

cards are mainly favourable, but where there is criticism of a particular point, it is almost always possible to find a report which singles out that point for praise. So it is all the more important to form panels large enough to enable these differences to be evaluated at their true worth.

To summarise: national television offers as part of its total output a powerful tool for teachers' use, a tool which must be recognised as having both advantages and disadvantages. It is contended that it has a place among the aids which are increasingly being seen in terms of systems as a whole, each aid fulfilling complementary functions. *Planning* presents problems where a centralised source is catering for a highly decentralised educational system, but there are many areas where television can be extremely effective: its ultimate effect, however, depends on the manner of its use by a teacher. *Production* can and must make fullest use of the resources of television: the outcome is a programme, not really a lesson. With full co-operation from teachers *assessment* is effective for running needs, but there is scope for research in controlled and limited situations, such as closed circuit television systems may be able to provide.

Consumer Response

E. HARVEY

Like many junior schools today, we use television as a regular and accepted part of our teaching. It was not surprising, therefore, that my eye caught a paragraph, written by Maurice Wiggins in the *Sunday Times* dated 1st March, 1964. The paragraph read:

'Have we been over-estimating television's power to teach? It all seems so easy and illuminating while it's actually going on, but without an assiduous follow-up — actual hard graft with the text-books—how much really sticks?'

Apart from some reservations about the rather jarring phrase, 'Actual hard graft with the text-books', I felt that the question was a valid one to which we might well seek an answer.

It seemed reasonable to direct our efforts first of all to finding out what the children themselves thought of TV lessons. They looked forward to and appeared to enjoy these lessons, but we wondered whether they had formed the habit of watching

television in a rather passive way and therefore might not, in fact, be deriving much benefit from the time so spent at school.

In the event, the outcome of this preliminary enquiry proved most interesting and thought-provoking.

The method adopted was to talk to the children about the programmes. Some of these discussions were recorded and this material was used for further discussion. The older children were encouraged to write down their opinions and these again provided material for discussion.

The opinions expressed often showed a surprising insight into the advantages and limitations of television as a teaching medium, and the children were very critical when they thought that the lessons compared unfavourably with those given by their own teachers.

One interesting result of these discussions was that the children followed the television broadcasts with added interest and had much more to contribute during the follow-up periods.

At this point it could be helpful to list a few of the children's opinions. These have been divided into those that may be considered favourable and those that appear unfavourable.

It should be noted that comparisons between BBC and ITA programmes have been deliberately avoided and that mention of particular programmes has only been made as a matter of necessity.

Favourable

'Television can get the best teachers. They can afford to pay them more.'

'Television brings the whole world into the classroom and can show us things a teacher could not.'

'It is a change from listening to the teacher and it makes the teacher's job easier.'

'Television can show us experiments which we could not do because we do not have the equipment.'

'Television can show us things moving. Pictures and the blackboard can only show things still.'

'People in history can be put in the proper clothes.'

'We can see inside buildings and what is happening there.'

'Television can use material from museums that we can't obtain.'

Unfavourable

'You can't ask the television questions.'

'I don't like it when they use words I don't understand because you can't ask them what they mean like you can the teacher.'

'A lesson can't be changed to suit our school.'

'They don't know where difficulties are so they don't stop to explain them.'

'If you miss a point you can't ask the teacher on the television to explain.'

'You can see things and hear things but you can't touch them and there are no smells.'

'We don't take part in the lesson but we have to sit still and watch and listen.'

'You can't laugh at anything because if you do you might miss something.'

'All the class listen to the same things and we can't work in groups.'

'They put too much in one programme.'

'They don't give you credit for having intelligence. Everyone knows that when you get in a bath the water rises.'

Apart from these 'For' and 'Against' opinions, a number of children thought it would be helpful if programmes could be recorded. The following are typical:

'It would be a good thing if we could make it like a tape recorder. We could stop the programme and our teacher could explain the difficult bits.'

'If we could make it like a tape recorder we could stop the lesson and go back.'

From our experience in the use of recorded BBC sound programmes the staff had no doubt that the introduction of video-tape recordings would be a great step forward but, failing this, it appeared that recording the sound only might be of some help. Tape recordings were therefore made of the sound track of several lessons. This was done by standing a microphone near the TV set and, to our surprise, the quality of the recordings was excellent.

These recordings proved of great use in the follow-up periods. In many cases they allowed a teacher to prepare diagrams and illustrations to reinforce and supplement the material presented during a broadcast. The children also thought the sound track most helpful for it enabled them to pinpoint their difficulties. These recordings were of particular value when used to follow up programmes where a logical development of the subject matter was a prime consideration, as in Mathematics and Science lessons.

In all programmes we found that the children were eager to raise points and ask questions immediately the broadcast ended. This immediate follow-up also helped the teacher, who could often note points of difficulty during the broadcast and deal with them while the general impression of the lesson was clearly in mind. One or more follow-up periods after an interval of a day or two also proved valuable especially when the recorded sound was available.

All the above considerations were clearly evident to the teachers. They were discussed with the children and it was surprising how well they, too, appreciated them.

The need for integration

During the various discussions with the children one very interesting point emerged. A group of 10-11 year old children constantly referred to and drew their illustrations from one programme. This particular programme also consistently evoked greater interest and enthusiasm among the group viewing it than any other programme. They seemed to gain more from the lessons than from other broadcasts.

The programme concerned was ITA's 'Primary Mathematics'. The children frequently criticised other programmes because there was too much talk or because the teacher was too much in evidence. Bright children found some programmes too elementary, while less able children found that some lessons were rather above them. But these criticisms were not levelled at 'Primary Mathematics' although in these and many other respects the lessons appeared neither better nor worse than many other broadcasts.

It was only after a great deal of discussion with the children that we found the reason for the success of this series. The clue came when one boy said, 'The lessons make you feel superior'.

It seemed that because the series dovetailed in so well with the work in mathematics done throughout the school, the children constantly found themselves on familiar ground. In other words, a great deal of preparatory work had been covered during the three years they had been in the school. We all know the extra interest aroused when, watching a television programme, we see on the screen a picture of a town or street we recognise, and I think that on these occasions we also have this feeling of 'superiority'.

It is encouraging to find that the use of structural material, an experimental approach and a broadening of the work attempted in mathematics have together given to the subject a fascination that is reflected in the enthusiasm with which the broadcast lessons are received by the children.

It is obvious that much is to be gained by close integration of TV broadcasts with the work of a school. This could be achieved by the production of a series of text-books and teachers' books closely linked to the material used in broadcast lessons. But this would have to be done for a number of subjects and one could not expect the broadcasting authorities to undertake such an expensive project.

It might, however, be possible to associate the

broadcasts closely with schemes of work and publications that are already used in schools and which have received the acclaim of enlightened teachers. What we want, and what the children would most appreciate and find most valuable, are TV lessons that do not by accident fit more or less well into the work done in a school, but are designed to form an integral part of it.

'Teachers' Workshop'

C. D. BUTLER

Our report on 'Teachers' Workshop' must be not so much a factual statement but more a note, an impression, about a number of things which have happened. It must depend essentially upon the willingness of readers to understand what is written 'between the lines'.

Let us face the so-called 'objective situation'. In our Institute area we have something like 7,000 teachers working in an area of about 7,000 square miles. About half of these are teachers in primary schools. Many of this 7,000 are becoming, as Sir Eric Ashby might have said in his presidential address to the British Association—'inevitably obsolescent'. Away from their initial training for ten years or more, and more emphatically in some fields of study than in others, they are now depending largely on what they have learned *since* they left college.

With a teacher concentration of little more than one per square mile to arrange face-to-face discussion is a matter of considerable expense in both time and money. The fact of geographical isolation affects the teachers in all subjects and in all types of schools. In the world of today, and above all in the primary school, there is a conscious need that mathematics should be made intelligible and interesting. We had, as an Institute, for many years conducted courses in primary school mathematics and were well aware that these courses were too infrequent in time and too scattered in location but, with our present staff and financial resources, we could see little hope of improving the situation.

We made the corporate decision that we might tackle the difficulty caused by the scattered teacher population if it were possible to present some of the leading ideas in the developments of primary school mathematics over 'open circuit' television. By this means we might hope to make contact simulta-

neously with many of the teachers throughout our area without the expense and fatigue of attending personal face-to-face meetings. Our decision to use the 'open circuit' television had the advantage that the broadcast would be heard over a wide area and presented by an experienced lecturer whose face would be familiar to a considerable number of the teachers. As compared with immediate discussion and argument, there were the limitations on what may legally be shown since we had to avoid any suggestion of advertising, and, finally, since every lecture must be pre-recorded, it had the danger of appearing to be a 'set piece'. As we will be seeing later, the advantages of the use of open circuit television, though undeniable, cost us a certain price in terms of effectiveness of communication to the individual teachers.

At the outset of the experiment we were aware of some of the problems facing us and what we hoped we might achieve. Little more. We were uncertain exactly what the content of the broadcasts should be, what time of day it would be radiated, who would be our presenters—we knew simply that there was a kind of need and we, with a brashness which, in retrospect, seems horrifying, set out to do something about it.

The search for money

It was quite essential that we should get money and backing from outside the university itself. Deo gratia, the Department of Education and Science encouraged us by making a grant of £1,300. Westward Television agreed to produce and record the programmes for a quite ridiculously small fee of £200 for a 'term' containing eight broadcasts, £25 a lecture. The I.T.A. gave us the transmitters free. Those familiar with the cost of television programmes will recognise that the payment we made to Westward Television barely paid for the electricity consumed in the rehearsal and recording of a twenty-minute broadcast, and therefore that the programme company itself, by providing us with equipment, the studio crew and a professional producer, was subsidising us very heavily. Those familiar with the cost of hotels and transport will recognise that, inasmuch as we made twenty-four broadcasts in a space of four 'Teachers' Workshop' terms, after we had paid Westward Television £600, there was little of the D.E.Sc. grant to deploy on anything more than the cost of the demonstration equipment and the cost of accommodation and travelling for our speakers between Plymouth, Exeter, Exmouth and Bridport. Our lecturers had no glamorous TV broadcasting fees! Introducing the experiment to the press, I commented that, 'like all

educational experiment, it rested upon scrounging, sweat, seduction and skullduggery'. This is the simple truth. Everyone concerned received nothing more than very limited out-of-pocket expenses. All the people involved in the writing of the scripts did so unpaid. The Institute's secretarial staff and laboratory assistant operated without additional pay. Teacher viewers at camera rehearsals came in out of affection and interest. Even our camera crew became as much involved in the game as we were ourselves.

Planning

The planning of the first term began with an 'Aunt Sally' list. This is an apt term for the kind of reaction to the mass of suggested topics which we circulated to a considerable number of teachers practising in the area in order to find which themes they themselves felt to be the more valuable, ones on which we should spend our time and money, those which they thought were nearest to their needs.

From this point onwards a group of lecturers in education and mathematics, with the help of practising teachers, worked over the suggestions. We modified suggestions, re-modified the suggestions, until, with the advice of our producer, we produced 'essay' scripts. We constructed or borrowed illustrative apparatus, made 'final scripts', and then 'camera scripts'. This whole organisation of programme construction from the circulation of 'Aunt Sally', through the times when we were arguing each week over the proposals to the point of major disagreement, and then finally to the concluding 'Thank God' session when we recorded number six of Term IV, is now a matter of fascinating history. We were experimenting ourselves, were ourselves in the 'learning situation' so far as TV production was concerned.

The comments coming from viewers, registered or not, proved that there were misunderstandings about what we should have tried to do, let alone what our intentions actually were. Whether aims were achieved or not, there were some who hoped we might provide detailed lesson notes, a sequence of instruction to which the viewer need bring a little more than careful study, and supply with it a prepared teachers' 'handbook'. Such people we were bound to disappoint, we should have had to have planned for many more lectures than were projected. In the mathematical fields there are many enthusiasts and many doubters, many experts and even more insecure ones. As we received comments from viewers, what did become obvious was that we were right to provide a series of broadcasts which could

be understood by teachers who were teaching mathematics against a background of comparative ignorance and insecurity. In many schools they were teaching children of a wide range and of equally widely varying abilities. Lecturers aim at encouraging them to solve their own difficulties and not at solving the difficulties by proxy. As our producer has said, in a contribution to the *Times Educational Supplement*, 'The essence of the exercise and perhaps its permanent value, lies in the fact that it was organised locally, and criticised locally'. We feel that, although we recognised the warts on our pedagogic nose, we are rather proud to have done it. Such was the terminus ad quem in our minds when we made our first bid for financial support.

Follow-up enquiries

As a condition of the initial research grant, the Department of Education and Science understandably required us to make a report to show in what way this use of television was effective in meeting our in-service obligation. We are at the moment carrying out two investigations by means of questionnaires. Firstly, we have taken one of a random sample of teachers as a tolerable representation of the whole body in the area, registered or not, and, secondly, a questionnaire that aims at finding out why some teachers, who had once shown interest in 'Teachers' Workshop' by registering for Term I, had failed to repeat registration for subsequent terms. Questionnaire responses may not be very reliable, nevertheless we are finding some very interesting evidence emerging from them. Up to the present we have received replies from about 65 per cent of the people to whom they were sent. They will be reported later.

This straightforward broadcasting of the programmes we now refer to as Phase I of the experiment. The programmes have been recorded on videotape and broadcast three times for each programme (a) on a Sunday midday, (b) on a Tuesday or Wednesday at near midnight, and (c) during the holiday period in the afternoon as a replacement of the normal schools programme. Although originally we thought of eight-week terms, three terms each, the planning proved too difficult. So we organised these twenty-four lectures into four terms, each containing six lectures. The titles were:

Term I

1. Shapes: Paper Folding
2. Shapes: The Family of Quadrilaterals
3. Measuring

4. Relations Between Measures
5. Dancing Squares: Film and Discussion

Term II

1. Shape in 3D
2. Regular Solids
3. Time the Intangible
4. Order out of Chaos
5. Do Children Understand?
6. Children's Workshop

Term III

1. From Measurement to Number
2. Numbers and Patterns
3. Thinking in the Solid
4. Rod Mathematics
5. More Rod Mathematics
6. Solid Reasoning

Term IV

1. Algebraic Experiences
2. Clock Face Numerals
3. Numbers in Pictures
4. Continuous Change
5. Number Pairs
6. The Final Programme

Teachers who were supporting the scheme, so-called 'registered viewers', received each television term a booklet which gave something of the thinking which lay behind the broadcasts and also references for further study of the topics dealt with. In addition to the questionnaires mentioned above there is considerable evidence about the total effect of the broadcasts. At subsequent meetings we faced the facts that the timing of the broadcasts, midday and midnight, was difficult. The signal strength was not satisfactory throughout the area. Publicity, in spite of our own and Westward's notices, was inadequate and teachers missed the broadcast. Nevertheless, the Company reported that we had a viewing audience between ten and fifteen times our registered audience. At specially arranged meetings which were part of our promise to registered viewers and were held at widely scattered centres, one of the more obvious pleas was that to get the material across to our teachers effectively we must get the broadcasts on to sound film.

The Institute secured a further grant from the Department of Education and Science and from the Gulbenkian Foundation which was sufficient to get the programmes of Terms I and II on to 16 mm sound film. With these films we are now holding meetings at fortnightly intervals all over our area besides lending them to L.E.A. and other courses from Mexico to Cairo to Edinburgh. Term III is now on its way from videotape to sound film. We are still searching for sufficient money to do the same with Term IV.

The third phase

The third phase of the experiment arises from the provocation caused as much by the insufficiencies of our broadcasts as from their perfections. This is not the time or place to discuss them but it appears cer-

tain that television for teachers should not aim at complete coverage of a subject with every detail being filled in. It should not, even in simple terms, aim at 'enrichment'. It must disturb the competent and complacent alike. We have shown that mathematics can be exciting for the non-mathematicians. There is no need for any teacher to contract out. It should lead to demands for further courses, perhaps of the Nuffield type, for the mass of teachers and not those aimed at the production of 'specialists'.

Perhaps our primary duty in in-service training is to find methods of provoking without being insulting. 'Teachers' Workshop' has proved to be one, at least, such method. Its very embryonic beginnings seem to have had the desired effects. When the questionnaire reports are in hand, they may suggest other and more useful 'provocations'.

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Book 3: 'O' level

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Book 3 covers the last two years of the five-year experimental 'O' level course of the Midlands Mathematical Experiment. Matrices occupy a great deal of this book and statistics and probability have received generous treatment. There is also an attempt to introduce a new viewpoint into calculus. 11s.

M.M.E. Report, 1963-64, containing an 'A' level syllabus, will be published in the autumn at about 5s.

M.M.E.'s new approach to secondary school mathematics continues to arouse enormous interest and at least 80 schools here and overseas are now using the experimental syllabus, described by *Astryx* in *The Times Educational Supplement* as "the most interesting I have seen in this country."

'O' level: Book 1, 7s. 6d. Book 2, 9s. 6d.
M.M.E. Report 1962-63, 5s.

Discussion

Team Teaching :

A Plea for Experiment

I know no school used by my college (Trent Park) for teaching practice which is experimenting with team teaching. Heads with whom I have discussed the method invariably show interest—some initiate the discussion—but not one has experimented. I would urge that as many schools as possible should experiment with a group of children and volunteer staff and attempt to publish findings. Little guidance is as yet available. Besides the article by Cunningham in *FORUM*, Vol. 6, No. 2, and two articles this year in *New Education*—by Rollings and Fitton in May and by Brown in June—I can trace only two American studies advertised in this country, Trump's *Images of the Future* and its more detailed successor, *Guide to Better Schools*.

Melbourne High School, Florida, described by Brown, has groups varying from 60 to 125 pupils taught by one teacher. On other occasions all four staff may be employed with one class each, or three members may be occupied with three classes, the fourth being given private study under the supervision of a prefect. Alternatively, in fortunate schools, the private work might be done in a library under the general supervision of a teacher-librarian. In Brown's school, the recommended time distribution is not more than 20% of time in large groups; 40% in 'critical analysis' groups of five to eight pupils; and individual learning 40% of the time. Trump, in *Images of the Future*, suggested discussion groups of 15 to 20 pupils. His suggested time allocation was 40: 20; 40 for large groups, small groups and individual study. The first of these seems excessive and is found so by Rollings and Fitton. The minimum size of small groups depends upon the staff/pupil ratio and the distribution of time.

Assume a school with a staff and head interested in trying team teaching and pupils presenting no greater problems than those of an average secondary modern school. The first step is to arrange teams of staff, each responsible for one subject, or perhaps, a group of subjects, to whom, say, 120 pupils are allocated. The next step is detailed planning of syllabus content and methods to be employed in covering it which are feasible in terms of available equipment and space, used with a certain amount of improvisation. In particular, a very large room or hall will be needed regularly for 40-minute periods for large group demonstrations or films, and it will be an advantage if audio and visual aids can be set up permanently. This may present difficulties but they are not insuperable.

Rollings and Fitton suggest, on the basis of their experience, that large group activity should be undertaken in at least one period in six, not more than one in three. If, therefore, we posit a 600-pupil school with three teams of 120 organised for team teaching and taking three subjects together, each of which would have

two periods a week in a normal timetable, the hall would be needed for two hours a day, or 15 periods of 40 minutes each week.

Where halls simply are not available, an alternative is to knock two or three classrooms into one, with acoustically proofed sliding partitions which can be rapidly placed or withdrawn. Or, where all classrooms open off the hall, high walls can be erected four feet from the hall walls, leaving a corridor all round—some schools have such a construction to provide extra classrooms, and it should not be impossible to devise folding (acoustically proofed) walls if the hall has to be restored to its original form for other uses. Alternatively, the local authority might provide an auditorium, built on mass-produced principles, to stand in part of the asphalt lake from which so many old schools arise.

Should it be decided to work in small groups with no more than 20 pupils, subdivision (either permanent or temporary) of normal classrooms designed for 40 children can follow. Private study areas will be more difficult to organise and can probably only be made available for a small number. But this underlines the importance of experiment, particularly in schools destined to have new buildings which can then request the kind of provision needed for new methods of teaching.

JOHN FREEMAN,

Trent Park College of Education.

Schools and the Consumer

With the formation of the Consumer Council, Associations and local consumer groups, this nation as a whole has become more conscious of the need to protect the public as consumers and to promote their interests. Towns forming local consumer groups provide a collective voice in their community and increase the awareness of local consumer affairs.

In our so-called 'affluent' age many consumers will buy an expensive item as 'good value', discarding a cheaper one as of less value. This is simply not true, as the *Which?* magazine shows, but 'paying for prestige' is particularly prevalent among teenage consumers who are more easily influenced by pressure from advertisers and the fact that they have the money for luxuries but not always the sound common sense for discerning 'good' buys.

Schools could, I feel, do a great deal to help, advise and educate the young consumers in their care, and indeed, have a certain responsibility to do so, in this aspect of education, just as in other subjects on the curriculum.

The formation of a consumer group among senior pupils in a school would give them the opportunity for constructive criticism of shops and stores in their own town and stimulate an objective interest in it. The name of the group, the form it would take and its subsequent activities would, of course, depend on the school, and the pupils' interest in such a group.

Many schools now take an active part in local government and civic affairs, attending council meetings, lec-

Some Aspects of American Schools

DAVID RUBINSTEIN

David Rubinstein, who comes from America, has been teaching for many years at Abbey Wood comprehensive school, London. He has recently been appointed to teach social history at the University of Hull.

In the summer of 1964 I visited the city of Cleveland, Ohio, attended some summer school classes and had lengthy talks with several administrators. Cleveland is an industrial settlement on the shores of Lake Erie, specialising in steel and related manufactures and transport on the lake. Its population at the time of the 1960 census was 876,050, making it the eighth largest American city. Significantly, its suburbs added another 920,545, so that in what is now typical American fashion the city itself is being decayed by the departure of those who can afford to do so into the suburbs, while the city becomes increasingly dominated by Negroes and other poor and culturally deprived groups.

A visit to such an area is of great interest, even though it is necessary to say at the outset that even for someone who is familiar with both English and American schools great care must be taken against

hasty generalisation. There are thousands of nearly-autonomous school boards in the United States and some 21,000 high schools alone, and what is true of Florida is unlikely to be true of Oregon. Nevertheless, biased as a study of any one area may be, it is not without value.

One major disadvantage of schools in the Cleveland area is not so serious in this country. Thanks to the fact that the English system is far more centrally controlled, standards of equipment and amenity do not differ enormously, at least not between neighbouring authorities. This is not so in the United States. Cleveland can easily rank as a depressed area, compared with the prosperous suburb of about 75,000 people immediately adjoining, Cleveland Heights. The school population of Cleveland is estimated at about 148,000, and a clear majority of the pupils are Negroes. This is so

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tures and competitive inter-school quiz programmes with great success. The scope here could be enlarged by lively discussion in school, with regard to the consumer and the local government. Why is the water rate determined by the rateable value of a house and not by the amount of water consumed? (Parents' views could be usefully acquired here.) To whom does one complain about mouldy bacon? Does the individual have a chance to improve the conditions of local lavatories and if so, how?

Most school staff, housecraft or technical rooms have a copy of the Consumer Association magazine *Which?* in their possession. Readers will know that this magazine usually gives a 'best buy' with its reports. Pupils can find out themselves, through their school consumer group, where these 'best buys' can be obtained in their own town. This usually means a simple, straightforward approach, individually or in pairs (but not *en masse* for obvious reasons), with politeness as the main asset.

I am sure that housecraft and woodwork teachers, particularly, can do a great deal to encourage an awareness in the vast differences in prices, simply because of the nature of their subjects. Why not let the boys buy their own small items necessary for a particular job themselves? With prices fluctuating between 7d and 11½d for ½ lb 1 in. nails, or 3d and 4½d for one sheet

sandpaper, I am convinced that they would soon find the best value for their money.

Girls could be asked to find out on a particular day, which was the cheapest store for ½ lb branded butter. This need not even entail its purchase or a query within the shop. In some towns it may be that there is little difference in prices but a great deal of difference in the type of service given. The courtesy shown and received in the shops could also be considered, at being asked for small items at small value.

Surveys of all types on chosen topics prove most worthwhile, with charts and comparisons really bringing the facts home. Are there enough parks? Which was the tidiest super-market that week? A comparison of the opening hours of various types of shops. These are just a few of the projects that a school group could tackle. A magazine published once a term could be given a name worthy of its cause and record the various activities in suitable ways.

So many of us deplore the state of affairs that exists where teenagers have such an abundance of money and lavish ideas on how they spend it. Let us help, encourage and stimulate the children we teach to a greater understanding and awareness of what it is, in fact, to be a 'consumer' of discernment.

ANN HEMMINGS,
Chester.

despite the fact that the Negro population of the city is about 30 per cent, as many white parents send their children to private and to Catholic parochial schools. White teachers are reluctant to teach in schools in predominantly Negro areas, and I was told that in the twenty largest American cities a majority of the school children are Negroes, a group who form only ten per cent of the American population. One Cleveland teacher told me that in applying for a post he was proudly told by the head that there were no Negroes in the school; this was clearly expected to be a great inducement.

Indiscipline is common in the Cleveland schools, and I was told by a reliable authority that corporal punishment, officially frowned upon but not forbidden, is widely used. Salaries are lower than in Cleveland Heights, where the average salary is about \$7,200 (or £2,600), and classes are larger. In Cleveland Heights there are about 20 pupils to a teacher, in Cleveland 29·6—1.

Cleveland Heights

In fact, the position is altogether different in the favoured suburb of Cleveland Heights. There virtually all pupils graduate from the one high school aged 17 or 18, whereas in Cleveland in 1964 only 54·8 per cent of the boys graduated and 66·5 per cent of the girls. From Cleveland Heights High (enrolment 3,300) 85 to 90 per cent go on to some form of higher education, compared to 30 to 35 per cent in Cleveland, where figures for individual schools vary from 12 per cent to 60 per cent. Cleveland Heights pupils come from homes which are in the main culturally advantaged. Attending several high school summer classes I was impressed by the seriousness of the discussion, the readiness with which pupils disagreed with teachers, and the numbers of pupils involved in these discussions. Later the Superintendent to Cleveland Heights schools told me that the average I.Q. in the high school is 115-117, meaning that the pupils fall into the top twenty per cent of the national intelligence range. In Cleveland, on the other hand, the I.Q. at high school level is slightly below 100, with all that this implies in lack of familiarity with books. In fact, the Chief of the Bureau of Educational Research in Cleveland told me, 'I.Q.'s in Cleveland are often meaningless, since many children come from homes so culturally deprived that tests devised by middle-class psychologists to determine standards of literacy and intelligence have little or no meaning'.

The problems revealed by these figures are serious, and not just in the Cleveland area. All over the country middle-class white parents have their children privately educated, especially in areas with large numbers of Negroes, thus reducing the public

schools to deprived groups, whether white or Negro. In the suburbs Negroes are still in the main forbidden, so that in the Cleveland Heights schools there are about 13,000 pupils, but only thirty to forty Negroes. It would seem to be especially true of New York and Washington that white parents in the cities do not have their children publicly educated if they can afford private schools, with the result that disparities are constantly widening.

The first view of American schools, then, was somewhat sobering. I was also not impressed by the fact that the status of teachers is low, or by some of the classes which I visited. In one a teacher, whose subject is normally science, was teaching English literature to a group of 16-year olds, and in another, pupils' 'reports' consisted of paraphrasing *Time* magazine, paragraph by paragraph. The Superintendent of Cleveland Heights schools told me that too many of his teachers rely exclusively on the 3 R's—'reading, rote and regurgitation'. Still, this problem does exist elsewhere!

Comparisons

I believe firmly that the comprehensive nature of American secondary education is the most important and most valuable feature it possesses, a feature that has much to teach us. I believe furthermore that the low standards common in many American schools are not due to their being comprehensive—after all, to compare American high schools which cater for all the local population with grammar schools which cater for twenty per cent is quite unrealistic. To say, as a recent correspondent in the *Times Educational Supplement* says: 'Physics lessons in grades 11 and 12 are obviously not up to the standard of British 'A' Level courses' is equally unrealistic when one realises that only some ten per cent of English children are being educated at 'A' Level standard compared to nearly eighty per cent of American children who are attending school at the same age. At the same time, it is necessary to recognise the fact that standards of teaching in American secondary schools are low compared to good English schools, and that the average tends to be emphasised at the expense of the above average. In both Cleveland and Cleveland Heights, for example, it is uncommon to study more than four or five subjects at the same time at secondary level, and those to a low standard. In Cleveland, for example, only about a third of each high school graduating class are learning a foreign language at the time of graduation, and this in a highly unspecialised school system. Even in Cleveland Heights in 1963 only 1,757 out of 3,300 pupils were learning a foreign language, though it should be stated that there were six languages to choose from.

I have presented a somewhat black picture of the American schools which I have seen, and it would be unfair to leave the story here. As I am reporting a personal experience I shall not stress the fact that education is far more abundantly and generously provided to American children than to their English counterparts, nor that school and community are more closely linked and share common standards and assumptions. The following are some of the advantages which particularly struck me as being worthy of emulation here.

For one thing, the pupils (and probably the staff too) have a much more democratic part to play in school life and a more varied system of clubs and societies than have English pupils. Elected student councils are the rule; they are free to make suggestions to the principal or head—who, however, retains the power of veto. Only pupils who have good marks are allowed to serve on the councils. The older pupils normally run their own clubs or, at least, have a major share in doing so. Pupils are not kept out of the school building before the start of the day or during the dinner hour.

Teaching conditions

The position of the teacher is a far easier one in Cleveland than it is here, inasmuch as he can be sure of more stability and the time needed to get on with his job. For example, dinner duty and playground duties are not required of teachers at the secondary stage. Part-time teachers are rare, presumably because of the fact that there are so many more university and training college graduates in America that not every highly-educated person is needed as a teacher. One official in Cleveland was horrified when I told him of London schools with three or more teachers to a class during one school year. He said that, while in the worst areas it was difficult to recruit staff, especially white teachers in Negro areas, once in the employ of the school board teachers almost always remained for at least the school year. The American teacher knows that his marking and preparation time will remain inviolate. A 1963 Cleveland pamphlet informs teachers: 'If you are unable to attend your classes, promptly notify your principal and substitute center. Automatic 24-hour telephonic service makes it possible for teachers to report absence and request a substitute any time of the day or night, seven days of the week, including holidays.' A system of substitute teaching, with teachers who are prepared to teach at a moment's notice within their competence and their areas, means that all absences will be covered with minimal disturbance and without taking up a large part of the deputy head's time in the unpleasant task of dragooning unwilling staff into

extra duty. Finally, teachers' councils meeting at regular intervals draw up and revise syllabuses and give suggestions about the running of the schools, and time is given, often during lessons for these meetings.

Visual and other teaching aids are most impressive in Cleveland. The city has had its own educational radio station since 1948, and 100 schools outside Cleveland use its programmes. A 1958 pamphlet says: 'The staff consists of a director; one coordinator each for elementary junior and senior high programs; eight others who produce, write, or direct radio or TV programs; an assistant in charge of technical operation; five technicians; two secretaries.' The station broadcasts from 8.0 to 4.0 each school day, and in 1958 there were nearly 100,000 class receptions of its programmes. Also in 1958 Cleveland had about 1,400 film and other projectors with about 5,000 films. Tape recorders and language laboratories have become very common in recent years; for example, there are two language labs in Cleveland Heights High school alone.

After a number of years of teaching one grows accustomed to the secretive manner of English local government officials and their attitude of unwillingness to part with information (The Department of Education and Science is blessedly different). One of the most significant and impressive phenomena in my experience in Cleveland was the ease with which one can secure interviews with leading officials, and the frankness with which they will answer questions put to them by strangers. At less than 24 hours' notice the Superintendent of the Cleveland Heights Public School gave me an hour of his time, and at even less notice the head of the Bureau of Educational Research of the Cleveland Public Schools (he has a department of over 20 people) gave me over an hour. 'Just quote me accurately,' he said. Other officials were equally generous and equally informative.

Non-teaching staff

However, far the most impressive thing to me about the Cleveland schools was the number of non-teaching staff, men and women whose function is to assist pupils and to simplify the tasks of the teachers. In Cleveland there are ten psychologists and 36 home visitors. In the 24 junior high schools there are 42 'guidance counsellors' and there are 42 more in the 12 high schools, specifically concerned with the progress of children in and after school. In the prosperous suburb of Cleveland Heights the numbers of ancillary staff are even more impressive. In one of the junior high schools there are three teachers out of 51 exclusively concerned with 'guid-

Comprehensive Reorganisation in Bristol

ROBIN KEEN

Robin Keen took a degree in chemistry at Imperial College, London, and a higher degree in the history and philosophy of science at University College, London. After four years' teaching at Alleyne's grammar school, Stevenage, he became head of the science department and later director of studies at Wythlywood School, a comprehensive school in Bristol. He has recently been appointed headmaster of Gillingham Technical High School, Kent.

It is impossible to judge the progress of the comprehensive principle in Bristol without some study of the background but this is not easy, even locally. First, the local morning paper has dismayed even opponents by its strange outbursts, while the evening paper has tended to mount a sniping opposition from a base of sheer ignorance of the facts. For instance, it informed its readers that under the authority's proposals 'the superb advantages' provided by Direct Grant schools would 'be denied to all children except those from well-to-do homes', spreading a confusion too great to be easily cleared by its subsequent recognition that 'only a small number of children will be deprived of the oppor-

tunity to go to direct grant schools'. More recently the *Bristol Evening Post* has confused reports by H.M. Inspectors with those by Local Inspectors. On the other hand it has published columns of letters, on both sides, while it also commissioned Professor Boris Ford to do an independent survey, though this has not been altogether uncontroversial.

A clear, concise history of the change to comprehensive education, with a survey of the difficulties the education committee has met in central areas of the city, has been contributed to *Comprehensive Planning* by the Chief Education Officer, G. H. Sylvester. In addition, the newsletters published by the Bristol Association for the Advancement of

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ance'. In another one with 742 pupils aged 12-14 there are three full-time secretaries and two librarians. In the high school with its 3,300 pupils there are 18 non-teaching staff out of 160, quite exclusive of office and custodial staff. The eighteen include eight heads and other administrators, only three of whom teach part-time, and ten counsellors, who advise pupils as to their general advancement, adjustment to the school and post-school career. One of the assistant principals is also the school's 'social director'. There are in addition three librarians, two office staff in the library and 12 other office staff.

To administer the Cleveland Heights schools with their 13,000 pupils there is a staff of 120 men and women. These include the superintendent and seven immediate assistants, and eleven 'co-ordinators of instruction' in various subjects, including one whose province is teaching aids. These men and women do not now teach, but prepare schemes of work in their subjects and visit the individual schools, from elementary to high school, at frequent intervals. Among the staff of the Board of Education is one whose position is entitled 'Office Assistant (in charge of calling substitutes)'. There are also three school psychologists, a senior therapist for speech and hear-

ing, two assistant therapists, a senior school social worker and two assistants.

It should be repeated that Cleveland Heights is a favoured location, with more than its fair share of financial, and therefore of educational resources. But its pattern is coming to be the prevailing one in the United States. There are many aspects of American education which we might not wish to emulate, including the perhaps excessive local autonomy with its resultant variation in standards. But in several important respects one can only hope to emulate American practice. There the teacher is able to get on with his job. He does not teach for his absent colleagues. He does not hesitate to be absent from school for legitimate purposes, as no one else will lose marking time to cover his lessons. His secretarial work is performed by an adequate staff. He is supported by a large team of psychologists and social workers. The United States will always be a wealthier country than Britain. But it is not beyond our ability at least to aim at creating an environment in which teachers teach, and are given adequate administrative and psychological assistance. Certainly we have here no grounds for complacency.

State Education during 1964 and 1965 represents a still, small voice of calm and consideration.

Diversity of approach

If lack of reliable information has been one problem, the comparative isolation of existing comprehensive schools is another. Though headmasters and deputies meet, there is in my experience little exchange between schools. Rather, copying and learning little from their neighbours, schools have pulled themselves to great heights by their own bootstraps. The outcome is a remarkable and valuable diversity of approach to problems of internal organisation and teaching. It is the more difficult to disentangle different methods because schools which are under heavy attack naturally tend to publish magazines, prospectuses, etc., which smack rather of glossy advertising material. Where it is possible to decode the labels of forms, it seems that the casts of school plays, the authors of poems in magazines, the demonstrators at Open Days, are often the brightest children. If a school stages a junior play 'produced by 2A' one has to decide whether 2E do no dramatics or whether the school has not yet the confidence to put their work on show. One can see the dilemma in this city. A letter was once printed comparing the overall percentage of pupils obtaining five G.C.E. passes in grammar schools with the percentage in comprehensive schools which take in the whole ability range.

It may be best to start by describing what has sometimes been called the march (or frog march), sometimes the drift, towards comprehensive education. This year three-quarters of all the secondary school entrants will go to comprehensive schools, of which there are now seventeen, but there was no mention of such schools in the 1951 development plan. This advocated tripartite courses, and apparently schools, but also the purchase of large sites with the observation:

'In many cases courses of different kinds will be provided on the same site, but there is at present no suggestion whether they should be combined in one school (the multi-lateral or bi-lateral school) or whether they should be provided in separate schools (the school base). A decision will be made in respect of each school as the time arrives for building it.'

It was in accordance with this policy, Mr. Sylvester claims, that the authority purchased sites of 30, 40 or 50 acres.

At first the decision arrived at was to build bi-lateral schools, with a six-stream entry, but these developed (as the 1964 plan states) into comprehensives. As they opened, in a giant ring round the city

—mainly on new estates, on excellent sites—experienced headmasters of widely differing temperaments were appointed and given a very free hand in the internal organisation of their schools.

Since each school started at a different time, and the word 'comprehensive' was slow to appear, there was no sudden swing to a different type of secondary organisation. The new housing estates, which mushroomed all round Bristol after the war, contained fewer education-conscious parents such as those who live in the more middle-class areas, so the schools were largely unseen and unnoticed during their first years. Indeed, several other processes were going on at the same time, for instance, the separation of secondary and primary schools which was only completed in 1958.

In Bristol, 30 per cent of secondary places were selective and hence (one suspects it was this way round) 30 per cent of pupils 'passed the 11+'. The neighbourhood of the typical 6-stream bilateral school did not provide this proportion of selected children, other areas exceeded it and the surplus children were brought in to make up the numbers in bilateral schools. But, if an assessment is to be made of the academic achievements of these schools, it must be remembered that these 11+ entrants were rarely in the top 10 per cent of the ability range; about 5 per cent of all pupils enter direct grant schools, and in the early days parental choice and a pecking order of schools steered the ablest pupils away from the new bilateral schools. But during the last five years or so several schools have been in a position to attract the brightest pupils from neighbouring primary schools. Moreover, all the schools now attract pupils from outside the local area who have just failed the selection test, parents having learned to opt for a non-selective place in a comprehensive school rather than taking up a place in a secondary modern school.

Academic quality

If, therefore, the selective process robs some comprehensive schools of the very best pupils, it helps to provide rather more pupils than might be expected of slightly above average intelligence. In the south of the city this may have served to balance the low academic standard of many local pupils as measured at the age of eleven. In the absence of published data this is only speculation, based on qualitative observation in one area, Withywood. One might hazard a guess that in some areas to the north, where the schools serve private housing estates, the basic intake is of higher academic quality. This method of distributing pupils certainly prevented many of the schools from becoming

neighbourhood or one-class schools. Since the 1964 plan would prevent parents from sending children out of the neighbourhood, it would drastically change the nature of the intake to each school.

Within the schools there has certainly been a great deal of upward mobility. At Withywood it was habitual to select from among third-year pupils an 'express' stream which took G.C.E. in the fourth year. In the first year a two-stream selected entry had been spread over three or even four streams so that the staff were generally unaware which pupils had been labelled as ducks or swans at eleven. The express streams, selected on likely achievement in one year's time, were never found to contain more than fifty per cent of 'selected' pupils. Over the years the express forms grew in numbers but the ratio hardly changed. Though the non-selected members had often been near-misses at 11+, some had been a long way down the lists.

Anyone wishing to demonstrate the fallibility of the 11+ exclusion examination, or the relationship between parental attitudes and academic success, would not be disappointed at Withywood. There was there—and this is true of most of the schools—little mobility out of academic streams. Pupils took G.C.E. at 'O' level when they were ready to do so at the fourth, fifth, sixth or even seventh year; weaker pupils simply took longer. Many sixth form pupils in the schools are studying for one or two 'A' levels and some 'O' levels.

The new sixth form

The Bristol comprehensive schools can, therefore, claim to have pioneered the sort of sixth forms where a pupil, going for an open scholarship at Oxford, studies alongside one attempting the basic 'O' levels for banking at the age of eighteen. A sixth former may very often be someone who has stayed at school for further education with no aim at 'A' level. Rejection at 16+ is as odious as rejection at 11+.

Mr. Sylvester believes (according to a report in the *Bristol Evening Post*, 14.7.65) that there will be movements between comprehensive schools at different ages so that pupils can take advantage of specialised courses at sixth form level. I shall be very surprised if he is right. Perhaps he underestimates the complexity of the mixed courses many pupils follow (one sixth-former recently gained 'S' level Chemistry and 'O' level English Language at the same examination), and the attachment of pupils and parents to their own school. It would be surprising if headmasters were prepared to lose specialist staff as must surely happen if sixth form work is removed. On the other hand, it is clearly un-

economic to teach, say, 'A' level Latin to groups of two or three pupils in schools within easy reach of each other. So far as I know, headmasters have as yet made no efforts to get over this; rather, they have developed a wide range of sixth form subjects. It may be that smaller teaching groups in the main school and fewer 'A' level subjects at sixth form level will be necessary if schools become neighbourhood units.

Over the years to 1964 the comprehensive schools have grown quietly in number, size, status and parental esteem. Although I would dispute Mr. Sylvester's view that they have been particularly strong settling influences on the new estates, in a social sense, there is no doubt that all have won the support of parents and that each has become identified with its neighbourhood through links with youth clubs, churches, etc. Naming the schools after the neighbourhood has proved a wise move, each name corresponding with a large estate (Brislington, Hartcliffe, Lockleaze, etc.). Some critics in educational circles say that most of these schools are grammar schools with long tails ('with big Heads' has been added, and whether it is an insult or compliment depends on the upper or lower case 'h'). This criticism seems to me valid, though most schools take exceptional care of their weakest pupils, but it may be that what parents want of the schools is identity with the neighbourhood and grammar school attitudes to behaviour, organisation, and discipline. Impressions of parents' meetings confirm this.

Traditional features

It may be that the reason why both Conservative and Labour Councils have found themselves able to support and extend the system is that most of the schools have only one radical feature: they exist. The majority are highly conservative in their attitudes to uniform, streaming, organisation, prefects, etc. It is hardly surprising, as Professor Ford comments in his report, that in a city with so strong a grammar school tradition as Bristol, the comprehensive movement can command wide support so long as it is not represented as a rival system but rather as an extension of the benefits of grammar school education to all—in terms, for instance, of greatly increased numbers of G.C.E. passes.

To turn to more recent events, it was in the spring of 1963 that the Labour Party displaced the Citizen (Conservative) Party, which had held control for three years. In July the Education Committee resolved to examine the possibility of abolishing selection throughout Bristol and set up a Development Sub-Committee which included mem-

bers of the opposition party. In September 1963 the Teachers' Consultative Committee had the first of four meetings with this sub-committee, and members are on record as saying that every effort was made to hear their views and to modify the plan in accordance with their recommendations. The representatives of direct grant schools have had three meetings with the sub-committee, but these did not begin until the plan was approaching a final draft.

In retrospect there is no doubt that the Education Committee made a tactical error by keeping the consultations within a small group, for information inevitably leaked out. Wild rumours then swept round, particularly about direct grant places; indeed this issue tended to dominate the controversy. In January 1964 the *Evening Post* published the contents of a report prepared by the Chief Education Officer for the sub-committee. By midsummer the leaks, denials, threats of disclosure, and 'inspired' press comment had been such that the Development Sub-Committee held a press conference in July at which details of the plan were given. But this resulted only in more press reports for copies of the plan were not made available until after it had finally been passed by a Council meeting on October 13. This left little opportunity for the public to be briefed or for any consensus of opinion to be sought. (Though exactly how parental opinion can be gathered, and what weight should be attached to it, is in itself a problem not peculiar to Bristol.)

The Bristol plan

The main points of the Plan are:

1. That in the long-term, secondary education in Bristol should be based entirely on a system of comprehensive schools 'catering for virtually all the children of their own neighbourhood'.

2. That in the short term, three different forms of secondary education should operate in different areas of the city.

- (a) The existing 17 comprehensive schools, serving as neighbourhood units, should absorb about 64 per cent of the secondary school population.

- (b) In the North and South Central areas, covering about 20 per cent of the population, selection should continue on the basis of teachers' recommendations. (Since in the North Central area the proportion of grammar to secondary modern places is 3:2, 'selection' should be interesting.)

- (c) In the East of the city, where secondary modern headmasters were in favour of a two-tier system, a modified Leicestershire scheme will operate for the remaining 16 per cent of children. (This means that some will move from mixed primary schools to single-sex schools at 11 and back into

mixed senior high schools at 13. The heads of East Bristol modern schools were the only group willing to accept re-organisation, prospective senior high school heads and staffs being unwilling partners.)

3. The present arrangements whereby the L.E.A. takes free places at the seven direct grant schools in the city should be discontinued. (At present these schools take virtually the top 200 of 5,500 eleven year olds. Hardly a boy—or girl—in the top 100 finds his way into an L.E.A. grammar school, a cause of resentment.)

The main points of this plan have passed with less scrutiny than seems right, largely because of the great fuss about direct grant places. Professor Ford maintains that the Education Committee has been consistent and, believing in non-selection, right in its decision on this point. Providing the comprehensive schools can cope with the 200 pupils concerned spread over the city—and I believe they can—there is no problem; but since most of these pupils will presumably end up in direct grant schools by another route, the whole argument seems superfluous.

As for the long-term plan, the Education Committee could probably have carried public opinion. The Conservative spokesman on education, Councillor Berrill, is quoted in the Ford Report as saying:

'We have developed two-thirds of the way to a fully comprehensive school system. I personally would continue to complete more comprehensive schools, whilst preserving the grammar schools in their present form, allowing them to go forward together.'

Zoning

But parents in the three central areas have voted with their children's feet. So long as 11+ failures could escape the secondary modern schools (rarely mentioned by Conservative spokesmen, though they are often doing a fine job in impossible buildings) and go to the comprehensive schools in the outer zone, objections to the bi-partite system were muted. But the new plan is to seal off the city into zones. Two streams of protest thus converged, from parents who wanted to get children into comprehensive schools and from the 'save our grammar schools' movement. The latter quickly raised the political temperature by petition and outcry, Old Scholars' Associations found a new activity, and with the formation of 'save our direct grant schools' groups the Great Bristol Row was well and truly on. What has been the result?

Teachers and officials have kept fairly clear of the

acrimonious and personal battles entered into by councillors and others in the local press. It is only recently that the comprehensive principle has come under attack in Bristol, an attack from extremists. This stems in part, however, from over-stated claims, based on dubious statistics, made by some on the Labour side of the Council. Inevitably these attacks have led to a closing of the ranks in comprehensive schools, in staffrooms where there was earlier a healthy ferment of criticism.

Relations at professional level between schools, never very close, have in no way deteriorated and it seems to me that Bristol teachers, divided widely in opinion, have much enhanced their professional status by their dignity and restraint under provocation from lunatic fringes. However, I think there is considerable misgiving about two features of the short-term proposals.

Short-term proposals

Firstly, arrangements for the central area, which seem ill-advised and hotch potch, have won much less than full support from the teachers concerned.

Secondly, those of us who have worked in comprehensive schools are concerned about the effect of zoning on the intake. On the Withywood and Hartcliffe estates nearer 10 per cent than 30 per cent of eleven year olds have been passing the selection examination. These are vast homogeneous estates, served by two comprehensive schools, which will eventually have a school population totalling well over 3,000. An indication of the one-class nature of these estates is that of the 130 teachers serving these schools only two actually live in local council houses. Short-sighted social planning has made it necessary to guard against a 'ghetto philosophy' and to 'ensure that the neighbourhood school has some social balance'. The phrases quoted are ascribed by Professor Ford to the chairman of the Education Committee. There is reason to believe that the Department of Education would also deplore a strict application of the neighbourhood principle where this would lead to undesirable social consequences.

A point well brought out by the Ford Report, but apparently not grasped by all Conservative councillors, is that 1965 is the year of crisis. The grammar-modern system cannot survive alongside the comprehensive system so long as there is freedom of choice: the electorate will not stand for secondary modern schools. Even the local grammar schools, which can be placed in a clear order of parental esteem, have been finding that pupils higher and higher in the lists have been choosing comprehensive schools. As pupils from comprehen-

sive school sixth forms have flooded out to universities and colleges (the very first university entrants figure in this year's class lists), and as news of places at Oxbridge won by 11+ failures gets round—and with as many as thirty different 'A' level subjects available at one school—more and more informed parents are likely to consider seeking a comprehensive school place whatever their child's level of ability. A parent with a backward child is almost certainly well advised to send him to one of the large comprehensives with a specialist department geared to this problem.

My own feeling is that the good Bristol comprehensive schools can do as much (if not more) for any pupil spiritually, morally or academically as any other good school in Bristol. But if the top 1 per cent (and I mean *one*, not 5 per cent) of the ability range were spread thinly over these schools, special provision would have to be made for them—and would be made—in the same way as is now done for pupils of exceptionally high or low talent in individual subjects. A very bright boy might have to be taught mathematics as he is now taught the violin, individually, and whereas I know his needs would be met there are pro's and con's to the question whether this is the best way.

Summary

As a summary of the state of affairs in Bristol the following points may be considered:

1. This year 75 per cent of secondary entrants will transfer smoothly to comprehensive schools from primary schools.

2. In a decade the comprehensive schools have established beyond any doubt their academic viability.

3. If the older ones are organised like extended grammar schools this has been well done and may have been tactically necessary. There are signs that the newer schools have interesting new ideas (e.g., Hartcliffe with its school and industry scheme). So far as can be seen (and one would welcome a full study) the schools have shown that personal contact is not lost in very large schools, a 'theoretical' criticism often made.

4. The eccentricities of the short-term plan are likely to harden opposition to the principle of comprehensive education, but in ten years' time the issue is likely to be as dead as is the 1943 free place argument in Bristol today.

I am grateful for permission from the Secretary of the Bristol Association for the Advancement of State Education for permission to quote from newsletters issued, and to the eight headmasters of Bristol comprehensive schools who supplied me with magazines and prospectuses.

Parents and Teachers

LEWIS SPOLTON

Lewis Spolton is at present a lecturer in education at University College, Swansea, where he went in 1961 after ten years as a headmaster, first of an all-age school and later of a large mixed secondary modern school in Nottinghamshire. Before this he had taught in a variety of secondary schools.

It has been claimed for comparative education that the study of the educational system of another country helps towards a better understanding of one's own system. Certainly the emphases seen in another system help to highlight one's own omissions. Two weeks visiting schools in Moscow, Leningrad and Riga gave an inkling into the extent of contact between parent and school in the U.S.S.R. The excellent Pelican original *Soviet Education* by Nigel Grant has a section (pp. 59-63) which deals with the formal structure of parent-teacher relationships in the U.S.S.R. but this article is intentionally anecdotal and details what was actually noted or pointed out during quite a short stay.

To me, as a geographer, it seems possible that the favourable climate of opinion towards parents in school may be fostered by the actual physical climate. The long and severe winter necessitating the frequent and prolonged use of overshoes and head-gear as well as overcoats by even the hardest schoolboy makes the provision of adequate cloak-room facilities in all public buildings of vital importance. Usually these cloakrooms are organised with astounding efficiency. Schools are no exception not only providing the storage space where garments and footwear can be stored but also foyers where outdoor clothes can be put on and secured before venturing into the elements.

Here parents could regularly be seen waiting for their children at the end of the school day—waiting inside the foyer and not at the school gate in the snow or the cold rain.

Young pupils

For children in the lower grades—the equivalent of our primary school—the end of the school day is round about 12.30 p.m. at the end of four periods, though some can stay on in prolonged day classes until called for by their parents or until parents are ready for them at home. The presence of parents on the school premises seemed very much a matter of course and from a group the headmaster of a Leningrad school introduced us to a parent (a

mother) who organised and supervised his school meal payment collections. Another school had a display of transparencies, aimed at waiting parents, dealing with care of the eyes.

The school structure, whereby all the grades of eight-year school (ages 7-15) or even eleven-year school (ages 7-18) are in one building means that schools with young adults have parents on the premises as a regular practice and the different lengths of school day for different ages means they are present during, and not merely at the end of school¹. This makes for easy and informal contact. I was impressed by the way the school foyers seemed well used and yet well-cared for. Although the outside of the school buildings was often unpretentious and even drab (the weather must make buildings look old quickly) the inside always seemed to be well cherished.

In the kindergartens taking pupils from 3-7 years the contacts with parents are, of course, even closer. Many of these have extended days (worked on a two-shift system) and can keep children until their parents call after work.

A kindergarten visited in Riga had a parents' notice board in the foyer. Its contents made a real pot-pourri. There were suggestions from a parent—a medical doctor—giving dietetic suggestions for other parents aimed at the care of children's teeth. Several drawings by pupils were displayed and there were notices from the school administration for parent's information.

Birthday celebrations

One of these concerned children with birthdays in April, the month of the visit. It informed parents when birthdays would be celebrated in school. For April there were to be two official celebrations—one for each half of the month. If possible the dates chosen are the birthdays of famous people. Whether this is to save too many celebrations or whether the aim is to make even birthdays collective rather than individual I didn't discover, but all parents were expected, as a matter of routine, to come into school and keep up-to-date with the notices.

After looking over an eight-year school the question of discipline was raised in a general discussion with the director. He said, of course they had pupils who didn't listen attentively all the time and he believed mischief was international—a comforting thought. However in cases of continued bad behaviour the parent's committee could be brought in to help with the problem and fines could be levied on parents or their place of work informed and

¹Since this article was written, the full school period has been reduced by one year (7-17). (Ed.)

asked to help. This seems a kind of blackmail. Conversely pupils who did well were listed in the local factories where parents worked and this brought kudos to parents and children alike. In the early grades the director said that between 20 per cent and 40 per cent of pupils might get a special notification of this kind but as pupils get older the percentage of notifications fell.

Approbation and censure by parents are an integral part of the system. Immediately the work of Highfield and Pinsent on 'Rewards and Punishments' springs to mind. These two research workers questioned both teachers and pupils on the efficiency of deterrents and incentives and compiled a series of informative lists. While both heads and assistants placed 'a good talking to in private' at the top of the deterrent list, pupils ranked this tenth and gave pride of place to 'an unfavourable report for home' which staff ranked fifth. As an incentive teachers thought 'quiet appreciation' most efficacious but pupils placed it seventh and gave top position to 'a favourable report for home' which was placed sixth by the teachers. This can be construed as showing that staff in this country may tend to over-rate their own influence as against home, a mistake into which the U.S.S.R. do not seem to fall.

Soviet Latvia

In Riga, the capital of Soviet Latvia, at a meeting at the Ministry of Education, it was noted that the four welcoming officials were the Head of the City Education Department, the Chief of the School System, the Director of Refresher Courses for Teachers and the Editor of the magazine 'School and Family'. The next day at a meeting at the House of Friendship three directors of schools spoke about Latvian Education for 15 minutes each. One spoke on parent-school relationships and stressed that home and school were permanently in touch and collaboration was mutual.

When children start school parents are offered lectures on child development and health and parents talk to other parents on how they bring up their children! These latter are formal lectures and not casual meetings in the street or park. Parents give help on school visits and with dramatic productions. Recently there had been a campaign, not merely against repeaters—those pupils who do not do sufficiently well to merit promotion—but also against those who only obtain pass marks, with the result that 28 out of a form of 32 had obtained good or excellent marks. There is machinery to help parents to help children who are absent through illness. Parents who are cultural artists or specialists of any kind go to school to help with circles

and clubs — opera singers, ballet dancers, artists, research workers, all take part. In our system many of these would have children outside the local school and the state system. There all children can be stimulated by the best talent that is available.

Similarly parents help with the activities at the Pioneer Palaces. In Leningrad top actresses and actors tell stories to Octobrists (ages 7-9) in the beautifully decorated rooms of the Palace on the Nevsky Prospect. Others help with their speciality. Outside the building photographs of the most honourable of these volunteer helpers are displayed. We may question their motives and the sincerity of the word 'volunteer' but is there much difference between this and an invitation to a garden party at Buckingham Palace or an M.B.E. for work with School Savings?

An article in 'Family and School' ends with two sentences which sum up the attitude adopted. 'The Soviet family and school share the same task—to rear and educate all-round highly developed, active and conscious builders of communism. It is therefore the teacher's duty not merely to maintain contact with parents, but to attract them into extensive participation in the whole life of the school'. If we substitute, in these two sentences, British for Soviet and democracy for communism, is there anything else we need to change?

Teaching French

ROY PALMER

Roy Palmer has taught in grammar and comprehensive schools for seven years, as well as editing three textbooks. At present he is head of the modern languages department at Shenley Court comprehensive school, Birmingham. This school opened in 1963 and now has some 830 pupils, comprising the first three years.

It was decided at the outset that all our pupils should learn French for at least three years. I disliked the practice of the 'grammar streams' having this book and the 'moderns' that, which is the case in some comprehensive schools; I wanted some sort of common approach and a common course, at least in the first years, even though the children varied greatly in ability and in the speed at which they would work. I therefore decided to use a common course-book as the basis of the work with all forms. Grammar-translation primers, which still

abound (some in disguise) were not considered. Let's-play-at-French books were rejected. (It's time someone produced a detailed critique of French course books, as Holbrook has for the English ones). I chose *Le français élémentaire*¹. The merits of this work are such that I wonder how some of the criminal nonsense still put before children has escaped burning.

Le français élémentaire is closely based on linguistic research². It is concerned with everyday spoken French, in everyday situations. It can be studied to various depths and at varying speeds. Very useful records and wall-sheets accompany it³. Other works based on the same research, such as *Mon premier dictionnaire en images*⁴, can be used in conjunction with it. There is no English in it. Above all, its content and the lavish use of illustrations permit the book to be used as the basis for an oral and active method of teaching French.

Material produced in France has a special appeal to children and it is not used nearly widely enough. I have obtained from a number of French publishers and suppliers⁵ mock coinage, records, film-strips and games (loto, jeu des familles, word-building cards) which are intended for primary children in France. I have found this material useful and stimulating, particularly the loto games (loto alphabétique, loto de la maison, loto d'histoire de France [see below], loto d'images: these are some examples).

Readers are more difficult. The problem remains of anaemic pap, produced in England, bedevilled by end-vocabularies or peppered with footnotes (if they need to be told the word in English it shouldn't be used) on the one hand, and of over-difficult French on the other. I have found only one reader produced in England which I would put into the hands of a first-former, *Les Duval*⁶. This has a very simple text (there is still a notion that this is letting the side down, if not downright sinful) and a large picture on every other page, which one can talk about independently of the text, if necessary. There is a vocabulary but it is detachable and, in my case, detached. I have also found useful a number of French publications with small text and much illustration⁷.

In the second forms I hope to introduce some of the Didier *Lire et savoir* series⁸ but at present I am using factual works — for example, a geography book⁹ — originally, again, produced for French primary children. There is enough fact and enough novelty to make these works interesting to a twelve-year-old and the French is mostly within his grasp. More important, the language is being used for communication instead of as an end in itself and the children are learning something about France in

French. We have carried this one step further with three forms which, in an extra weekly period of French, are following a course of French history (which is to continue into the third year), using film-strips¹⁰ (so that the material may be presented orally) followed up by a textbook¹¹. The pupils take a separate examination in French history and the subject appears on their reports. We are carefully watching for the effects of this on their 'pure' French. Whatever happens we shall have directed their attention beyond the classroom.

We increase their contact with French outside the classroom by publishing a broadsheet, *Cocorico*, which has included poems, stories, competitions, factual matter about the school, France, the weather, extracts from pen friends' letters. At the moment we are making plans for Radio Cocorico (but not, as had been thought by some of our colleagues, by mooring a boat in the middle of the local reservoir).

At our French Circle children skip and play ball games to traditional *formulettes*, play singing-games, act and dance folk dances. Last year they entertained the school and visitors at a special performance. This year, another programme, including Polichinelle, is to be presented as the climax of a French Week of meals, films, folk singing, exhibitions and daily *Cocorico*.

These activities in turn reflect back into the classroom. French is not an 'academic' subject but something living, something capable of providing a worthwhile experience, both linguistically and emotionally, to both halves of our future.

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- ²This research is summarised in *Le français fondamental*, 2 vols., available from Harrap at 5/6d. each. It is critically appraised in Halliday, McIntosh & Strevens, *The linguistic sciences and modern language teaching*, Longmans, 1964.
- ³Two albums of 10 EPs, 36s. each. Twelve double-sided wall sheets, £8 5s. There is also a teachers' book at 14s. (All published by Hachette).
- ⁴P. Fourré, Harrap, 12/6d.
- ⁵Editions Studia, 48 rue d'Alésia, Paris 14e. Editions M.D.I., Boîte postale No. 33, Saint-Germain-en-Laye (S. & O.) Scolavox, Boîte postale No 85, Poitiers (Vienne). Fernand Nathan, 9 rue Méchain, Paris 14e.
- ⁶A. Topping, Edward Arnold, 5s.
- ⁷The best of these is M.-A. Hameau, *Je lis, tu lis*, vol. 2, Hachette, 10/6d.
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- ¹¹A. Bonifacio & L. Merieult, *Histoire de France, cours élémentaire*, Hachette, 7/9d. (paper).

A Sane Re-appraisal

Education and Contemporary Society, by H. L. Elvin.
The New Thinkers' Library (Watts, 1965), 220 pp., 15s.

In this timely book the Director of the Institute of Education of London University puts the main controversial problems of English education today in the steady light of reason, and reasonableness, and in a wide perspective.

He examines the influence upon current educational thinking of relevant contemporary studies in the field of sociology and psychology and in relation to social philosophy and comparative education. He appends a useful annotated bibliography for the guidance of the layman.

Discussing the failure of the 1944 Act to bring about the degree of equality of educational opportunity that we had confidently hoped for, at least within the State system, he finds that adverse factors have proved the most intractable. We have a clear recognition of this in the recommendation of the Newsom Report for social action in slum areas. When we look at the independent and private sector, the fact of inequality becomes more glaringly obvious. He concludes that the rights of society as a whole forbid anyone to claim as absolute the right to purchase exclusive and socially divisive educational privilege.

Mr. Elvin brings into focus the series of interconnected problems that constitute FORUM'S distinctive 'platform': selection at 11, the nature of I.Q., streaming, comprehensive reorganisation, educability of children beyond predetermined limits, and the fallacy of the idea of the 'pool of ability'. On this last point he speaks with authority for the statistically supported conclusions of the Robbins Report.

In Part 2 (Problems and Policies) he argues decisively for the democratisation of education, for the manifold emergence of élites in an open and pluralistic society, and therefore for the idea of a culture sustained communally and not by a socially differentiated caste.

He takes a realistic view of the actualities and potentialities of our present situation. Although he vastly prefers the fully comprehensive school (11-18) to the tripartite system, he comes to the conclusion that, having regard to all the relevant factors, the problem of secondary reorganisation would be more widely and expeditiously solved by the common secondary school to 15 and differentiated education thereafter: for those staying until 18, in the sixth form college: for the rest, an outward-looking education for their last year at school followed by two years' related part-time education.

Those who oppose the idea of the sixth form college, or have strong reservations, will not go all the way with Mr. Elvin in his views of the place, functions, and attitudes of our sixth formers where secondary schools have

adapted themselves to meet new legitimate demands. However, it does weigh in favour of his scheme that it would ease the problem of bringing the preparatory and public schools within a national system, by offering what those with social imagination might in due course be disposed to accept willingly, and the rest lest worse befall.

The proposals do not seem to me to be incompatible with the co-existence of fully comprehensive schools where they can be established and developed. What may appear to some reformers to be a less favourable policy might yield earlier and more beneficial results than an uncompromising policy for fully comprehensive schools throughout the whole system. Whatever conclusions we may come to in re-appraising our views in the light of Mr. Elvin's thesis, we owe him a debt for his lucid exposition of the criteria by which he tests his own.

H. RAYMOND KING.

Ideas Man

Innovation and Research in Education, by Michael Young. Routledge and Kegan Paul (1965), 25s.

'Unless today's reformers do submit to assessment they will be liable to the same eclipse that befell many of their predecessors.'

Michael Young says this of current reformers of curricula and teaching methods. He labels many reforms 'fashion'. As the new Nuffield approach to science teaching may be the phoenix rising out of the ashes of Armstrong's 'heurism', so the 'direct method' of language teaching is having its second season in this country, and the programmed learning school is taking up the threads of Pressey's innovation of 1920. While we may not accept Young's suggestion that we progress if at all, in circles, it is difficult to escape his main conclusion, that is—link research and innovation and evolution will replace revolution. This link, according to Young, is 'the best hope for research in education'. Young makes it clear that he is not only concerned with research related to changes made with the expectation of social or educational improvement, but also with changes made in order to find out what happens.

According to Young the motivation for innovation has currently three origins, the over-population of schools, the 'knowledge explosion' and the development of the egalitarian ethic in Western civilisations. From the first two there stems innovation in curricula and teaching methods. From the third stems innovation in school organisation and design, and in the relations between educators and parents. Young discusses examples of each kind of change and relates each to possible causes and to problems of evaluation. The personnel who are involved or who in the future may become involved in both innovation and research are described, including two over-drawn caricatures of archetypal innovator and researcher. A chapter on research methods may be read with a facility rare for such weighty matters. The hazards of applying the methods of experimental natural philosophy to educa-

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tional problems are clearly indicated and perhaps over-emphasised. Finally, the organisation and financing of future research are discussed and proposals suggested.

This book is easy to read. The flow of ideas is prolific and stimulating. There are faults, however. Young seems to me to pose as a thoughtful researcher at one time and as an innovator (less thoughtful) at another. It is as though this schizophrenic performance was designed to support one of his cruder generalisations, that 'innovators and researchers are not natural bed-fellows'. The chapters on Innovation in the Classroom and Research Method were written by the researcher. The chapters on Families and Pupils, and Co-operation between Home and School by Young the innovator. It is difficult to reconcile the clear analytical approach exemplified by the following statement from Innovation in the Classroom with the sloppy question and generalisation quoted below.

'The practical need is to find out about the effect of the new courses. In what ways does a "new science" child differ at the end of his course from an "old science" one? . . . What we really want to do is to relate causes to effects and where both are complexes the answers are bound to be complexes too. The benefits of, say, "new" and "old" mathematics will have to be subdivided skill by skill. Advantages may well vary from one aspect of mathematics to another. The new way may produce a better grasp of tactics and strategies while the old produces more skill at calculation, or on the other hand the advantages may be totally unexpected or so slight as to defy measurement.'

With reference to the relationship between social class and scholastic achievement: 'Why should the mother's efficiency be so dependent on class?'

With reference to curriculum and the 'Newsom child': 'To start with jobs should be one good rule.'

Young's attempt to reduce the mystique of research is praiseworthy, especially where this leads to exploring the potential of team research involving teachers as well as specialists. However, Young's affinity for sociology seems to have caused him to play down the importance of operational research, particularly in assessment and curriculum studies, and to neglect the natural sciences as a not inconsiderable source of inspiration to educational research.

There are three appendices to the book, each full of interesting information. One deals with research in Departments and Institutes of Education, another with the organisation of educational research in the U.S.S.R. (by Dr. W. D. Wall), and the third with educational research in the light of Australian experience.

J. F. EGGLESTON.

European Forum

Paedagogica Europaea, The European Yearbook of Educational Research, Vol. I, 1965. W. and R. Chambers Ltd., 284 pp., 75s.

This new yearbook is a Western European venture with an editorial board drawn from Holland, France, West Germany and England; the managing editor being Pro-

fessor W. A. Lloyd, of the University of Cambridge. The venture is supported by the Council for Cultural Co-operation of the Council of Europe, which apparently does not include any East European countries. Although its subtitle indicates that it will concentrate on educational research, it appears to take every aspect of education for its province, an editorial statement saying that the Yearbook has been started 'to provide a European forum for the discussion of educational questions'.

The contributions are somewhat miscellaneous (and printed in one of three European languages) as is perhaps inevitable. Some discuss the nature of educational research, some the results of research; one, by a Dutch educationist, gives a competent analysis of a recent (English) publication on educational psychology in the U.S.S.R. Most of the British contributors stem from Cambridge.

Apart from the general articles there is an international section concerned with international co-operation in Western Europe, and a national section which includes a useful survey of the Swedish school system.

As this is a first volume perhaps it is a little early to judge the project as a whole. Future volumes will consist mainly of original articles based on empirical research. An annual volume which acts as a focus for reporting and summarising educational research should certainly be valuable. In the meantime, those with a gift for languages (French and German as well as English) will find much interesting material in this first volume.

J. WESTON.

Two Symposia

How and Why Do We Learn? Edited by W. R. Niblett. Faber and Faber (1965), 196 pp., 21s.

Eighteen Plus. Edited by Marjorie Reeves. Faber and Faber (1965), 226 pp., 25s.

The publication of symposia of lectures increases year by year to everyone's advantage in the educational world, and especially to those educators who would have liked to have heard the lectures personally. Both these books are concerned with symposia; the first consists of a series of public lectures at the University of London Institute of Education during the session 1963/64, and the other records some of the papers given at a Higher Education conference in September 1963, with some post-Robbins report revisions and some continuing comment by the editor. It seems better, too, to include a diversity of specialisation in such symposia; indeed, Professor Niblett manages to recruit from outside the academic sphere as well as from within, so that we can read Professors Wiseman and Morris viewing the same territory as Stephen Potter and Lord Caradon but obviously equipped with very different spectacles.

The learning process needs more and more investigation. We hope to know more before long about the connection between physiological development and mental capacity instead of the traditional approach of psychometrists. *How and why do we learn?* tries to throw some light on the problems to be tackled. The

role of programmed learning in Harry Kay's lecture and the dynamics of group learning interestingly introduced by Ben Morris are especially relevant to the contemporary dilemma, for our educational institutions must weld together the individual's challenge of information interpretation with the social cohesion of team work. Professor Wiseman's lecture on learning versus teaching reminds us of the lack of research on teaching effectiveness, whilst Professor Doris Lee's lecture on perception pinpoints some of the major difficulties in understanding the learning process. She says, 'More information about and understanding of the ranges of possible stimuli and responses would enable happier adjustments in both general and specific learning situations.' Although one regrets the absence of any contribution from the field of physiological psychology, the book makes a most useful summary of some of the problems. FORUM readers will be particularly interested in Dr. Taylor's lecture where he deals with learning to live with neighbours and indicates the scope of community involvement which the school of the future must consider.

The subtitle of the second book, 'Unity and Diversity in Higher Education', gives more information about its content than *Eighteen Plus*. Technical Colleges, Training Colleges, and the sixth form are especially considered; the first two are aspects of the diversity whilst the sixth forms are seen as possible junior colleges of higher education. It would be more reasonable to substitute the adjective longer for higher as we believe that education is a continuous process. The task of this

conference would have been made easier then, for some of the problems are really hierarchical. The status of higher educational institutions needs research, too, and we might be able to liberalise more easily if this happens. At least this book honestly states the dilemma of many educators concerned with personal values.

ERIC LINFIELD.

Local Initiative

Comprehensive Planning. A symposium on the reorganisation of secondary education. Edited by Stuart Maclure. Councils and Education Press (1965), (1 Devonshire Place, London, W.1), 80 pp., 6s. 6d. post free.

Government of Education, by W. O. Lester Smith. Penguin Books (1965), 207 pp., 3s. 6d.

An invitation to eleven chief education officers to describe how in practice they have set about reorganising on comprehensive lines has produced eight accounts from county boroughs (Bradford, Bristol, Cardiff, Coventry, Doncaster, Glasgow, Liverpool, Stoke-on-Trent) and three from counties (Durham, Leicestershire, the West Riding), introduced by the editor of *Education*.

The details of most of these plans are familiar to FORUM readers. But the chief education officer for Coventry makes the essential point by underlining that, while the increase in the school population provides

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BRIAN SIMON

The first volume of Brian Simon's *Studies in the History of Education*, welcomed as a fresh and interesting analysis of educational developments, covered the period 1780-1870. This second volume takes the story up to 1920, concentrating particularly on the policies advanced by organised labour to open up equal opportunities for all

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new opportunities for moving towards a fully comprehensive system, the key is held by those who control building programmes. Heavy cuts in these such as have been common form—Coventry's 1965-6 programme was cut by 40%—necessarily prevent ordered advance and penalise new schools which open in bits without a fully comprehensive intake. There are inevitably problems about planning the best way forward but they are greatly complicated by uncertainty about the central authority's methods of allocating or withholding funds. Moreover, freedom of action has recently been curtailed by the new ceiling put on mini-minor works.

Since these accounts were written the Department of Education and Science has required reorganisation as a matter of national policy, so taking control of the movement towards comprehensive education. While this should mean that other authorities move into action, it may be hoped that those which have been setting the pace will not be held up—for instance, by prolonged consideration of schemes without adequate consultation and interference in matters of detail.

'It is sometimes forgotten,' writes the onetime director for Manchester, W. O. Lester Smith—in a Pelican Original devoted to the government of education—'that from 1902 onwards local education authorities . . . have played an important missionary role, often championing causes that would have made little progress if they had not backed them strongly.' This is certainly true of the comprehensive school. Anyone who wishes to know more about the relation between central and local authorities, the complex problems of administration generally, will find much of interest in this book which draws on the wide experience of an enlightened educational administrator. J.S.

Twenty Years On

Culture and the Grammar School, by Harry Davies. Routledge and Kegan Paul (1965), 182 pp., 21s.

The main trouble with this worthy book is that neither of the terms of its title can be simply or, for the majority, acceptably defined.

What is Culture? The author thinks it possible to detect the emergence of three cultural groups which he calls the Establishment, the Intelligentsia, and the Majority. The Intelligentsia is mainly the product of grammar school and university, whose members 'have escaped equally from the stuffy conventionality of the middle-class, and the stifling and limited working-class background'. They read the *Guardian*, the *Observer* and the *New Statesman*, are humanist rather than religious and tend to question orthodoxy in the sphere of morals, politics and the arts. It is with this group that Mr. Davies tentatively identifies the grammar school 'since it is very much concerned with the emergence of the Intelligentsia and with the border-line between that group and the Majority'.

But what is the grammar school? Lady Simon asked this question recently in the correspondence columns of the *Times Educational Supplement*. There was no

response. No repetition of shibboleths can alter the fact that the cultural levels of grammar schools vary enormously and that other forms of secondary schools, not only comprehensive schools, are now doing work and achieving results comparable with those of some selective schools, but only through an extravagant dispersal of suitably qualified staff. There is no such thing as *the* grammar school. The author, of course, knows this and, indeed, acknowledges it repeatedly, yet persists in his view that *the* grammar school not only will but should survive.

In his introduction Mr. Davies alleges that the grammar school is under strong attack and that many of its enemies look forward to its early disappearance. This kind of emotional language is mischievous and unworthy of an educationalist. What is under attack, to use the same jargon, is the whole business of selection, and if this attack succeeds the maintained grammar schools will inevitably be absorbed into an integrated system of secondary education. If this is to be interpreted as destruction, abolition, assassination and bastardisation of the grammar schools then language and logic have lost their meaning.

There was an H. Davies twenty years ago who wrote: 'Where the three types of secondary school are established side by side, administrators, inspectors, and all in authority must unite their efforts to see that the grammar school does not, in fact, retain its superior position . . . The multilateral school seems to offer the only real hope of effective equality'. But a subsequent statement was inexplicably contradictory for in the preface to the same book (*The Boys' Grammar School*, Methuen, 1945) he added: 'While one can support wholeheartedly plans to establish a unified system of secondary education, it must be clear that the other types of school are not to be allowed to progress at the expense of the grammar school'. He surely must have joined the I.A.H.M. overnight. The present Harry Davies seems to have inherited this addiction to ambivalence; another reviewer of the present book has rightly suggested that it might well have been entitled 'Culture in the School'.

There are chapters that deal, rather verbosely I fear, with current themes like General Studies, External Examinations and the Curriculum, Authority and Freedom in the School, and Religious and Moral Education. It is all very urbane but on closing the book one tends to ask, 'So what?' The fire in the Todmorden lad's belly has gone out. B. F. HOBBY.

Educational History

English Education, 1789 to 1902, by J. W. Adamson. Cambridge University Press (1965), 519 pp., 75s.

Four Hundred Years of English Education, by W. H. G. Armytage. Cambridge University Press (1964), 353 pp., 17s. 6d. (paperback edition).

Hope Deferred, Girls' Education in English History, by Josephine Kamm. Methuen (1965), 324 pp., 35s.

Educational Documents, England and Wales, 1816-1963, by J. Stuart Maclure. Chapman and Hall (1965), 307 pp., 50s. (paperback edition 25s.).

The Story of the New Education, by William Boyd and Wyatt Rawson. Heinemann (1965), 202 pp., 25s.

There is no space to do more than draw the attention of FORUM readers to this group of books on the history of education. J. W. Adamson's classic *English Education*, published in 1930, has long been out of print and indeed virtually unobtainable so that this re-issue will be very widely welcomed indeed. It remains by far the most comprehensive book on its period and should be read by anyone who wishes to understand the nature and development of our educational system.

Two new books cover a longer period. Professor Armytage's very lively and stimulating textbook comes right down to the present day, and is full of the kind of sparkle we have come to expect of this author. This new history should be extremely valuable for students in particular. Josephine Kamm traces the history of female education from medieval times also to the present day, so contributing to a strangely neglected aspect of educational history.

Of particular interest is Stuart Maclure's collection of documents. There is no comprehensive collection of 'readings' to supplement the study of the history of education but this collection fills a gap and will certainly prove most useful. The selection is made specifically from 'leading official documents which plot the development of a public system of education in England and Wales since 1816'. These are taken from reports of commissions, departmental committees and other official bodies, speeches of Ministers introducing the famous Bills, White Papers, and so on. The selections are well chosen; in making available extracts from original documents, Stuart Maclure has rendered an important service to historical study.

Also historical in approach is William Boyd's and Wyatt Rawson's history of the New Education Fellowship. The origins of the 'new education' are traced in the pioneer schools of the late nineteenth century through the early decades of this century to the foundation of the N.E.F. in 1921. If the 'progressive' movement in education largely developed in private schools as a reaction to the rigidity of the public schools of the day, it has certainly had an influence on thinking about education, and hence on the state school system. This book brings out well the international scope of this movement.

B.S.

Psychology and Education

Concept Growth and the Education of the Child: a Survey of research on conceptualisation, by J. G. Wallace. National Foundation for Educational Research (1965), 268 pp., 42s.

Thinking in Structures, by Z. P. Dienes and M. A. Jeeves. Hutchinson Educational (1965), 128 pp., 21s.

These two books reflect the greatly increased interest in concept development and thinking characteristic of the last few years and undoubtedly of great significance for education. Mr. Wallace, in a very tightly organised

survey, describes and examines recent research over a very wide field indeed. His book is divided into two main sections, one covering what he calls 'the behaviourist mould', the other, the 'main stream of ontogenetic studies' which is concerned largely with Piaget's work, especially on the formation of mathematical and scientific concepts. The work of Luria and other Soviet psychologists is assigned to the behaviourist section; yet their approval has little in common with behaviourism.

There is a chapter on educational aspects of studies on conceptualisation, another on the mentally and physically handicapped, and a concluding discussion pointing to unresolved issues. Altogether this is a most valuable book and, if somewhat hard reading, one that will well repay study by anyone who wishes to grasp the nature and direction of what is probably the most fruitful field of research in educational psychology.

Professor Dienes, well known for his pioneering work on mathematics, together with Professor Jeeves (both at Adelaide University), has produced the first volume of a series entitled 'Psychological Monographs on Cognitive Processes'. As Sir Frederic Bartlett points out in his foreword, the new experimental methods employed for the study of thinking stem from the work of Bruner at the Centre for Cognitive Studies at Harvard. The book describes the actual experiments used and includes a most stimulating chapter on the educational implications of the research findings. It is work of this kind, and that described by Mr. Wallace, which is at last linking research into human learning with the practice of education, so holding out the prospect of basing educational methods on a firm scientific foundation.

B. SIMON.

Education Today

An Introduction to the Child Care Service, by John Stroud. 216 pp., 12s. 6d.

Communication in Speech, by Arthur Wise. 157 pp., 10s. 6d.

Social Studies and Social Science in Secondary Schools, by W. Philip and R. Prest. 119 pp., 10s.

Student Guidance, by F. Claude Palmer. 108 pp., 10s. (All published by Longmans, Green & Co. Ltd., 1965.)

These are the first four titles of a new paperback series which should receive a warm welcome from teachers, students and others. The authors of the book on social studies teach at Kidbrooke school and have tried out their methods and courses there. Claude Palmer teaches at the Barnet College of Further Education and discusses in detail issues raised by Mr. Prideaux (recently Principal) in FORUM, Vol. 7, No. 2, where this book was foreshadowed. The two next books announced, on programmed learning and on science teaching, are by FORUM contributors (John Leedham and Michael Robinson). The publishers have an ambitious programme including both practical handbooks for classroom use and theoretical discussion of controversial issues.

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