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Research on Streaming in the Primary School J. C. Daniels

Some Impressions of Jean Piaget and his Work Eric Lunzer

Associations for the Advancement of State Education Ann Wiard

Discussion

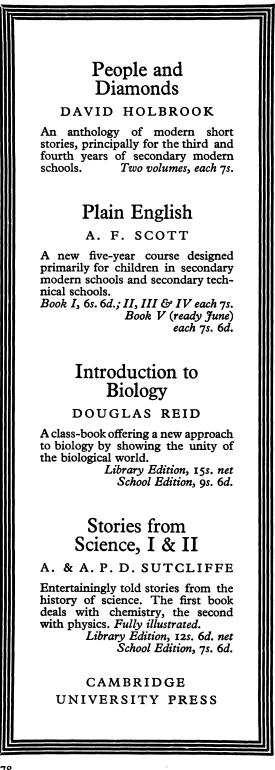
G. Price, S. Hiller, D. Rubinstein, H. E. Hopper, G. Summerfield, K. W. Coram

Schools Television Margaret Rawlings

Working Class Students A. H. Halsey

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J. C. DANIELS

After teaching in schools in the Manchester area, Dr. Daniels was appointed as a Lecturer in the Institute of Education, Nottingham University, in the late 1940's. His work with H. Diack on the teaching of reading is well known. Dr. Daniels' research for his doctorate was specifically on 'The Effects of Educational Segregation', and in this article he assesses the present position in relation to research into junior school streaming.

The wisdom, 'fairness' or necessity of streaming, or 'ability grouping', in the junior school is today being widely discussed. For the first time since streaming was almost universally adopted in English junior schools during the 1930's, numerous individuals and some education authorities are carrying out organised research aimed at discovering whether the claimed advantages of streaming are actually fulfilled in practice. What is rather remarkable, however, is that, to all intents and purposes, no research was carried out in England either before or during the thirty years when this practice established itself so firmly in our English schools. What makes it still more remarkable is that streaming at the junior stage remains to this day an almost specifically English phenomenon. 'However do they carry on without it?' is the question often put to us by puzzled English teachers when confronted with this information.

Theory follows practice

All this suggests one thing very clearly. Streaming is not a principle of primary school organisation which has been deliberately introduced as a result of the application of newly discovered information about children or the processes by which they learn, information brought to light by research in educational psychology. Historically, the practice of streaming came first, the theorising which commended the practice several years later. Today, however, the advocates of streaming, feeling their policies to be in some need of defence, unabashed take their stand on two counts:

1. Streaming, they say, naturally follows from the discoveries in psychology of individual differences in 'educability'.

2. The practice of streaming provides sufficient evidence of its wisdom by its very success.

It is not the purpose of this article to investigate

the complex inter-relationships of the psychology of individual differences and the practice of streaming. We are concerned only to examine evidence as to the practical effects of streaming. However, it is necessary to underline one important historical fact. Streaming in the junior schools derives directly from the needs of the 11 + selection procedures and the tripartite system of secondary education. All three are inseparably bound up with the notion that only relatively few children are intellectually capable of profiting from advanced secondary education, i.e. grammar school and university. If the wisdom of junior school streaming is being questioned today, it is largely because the wisdom of restricting advanced secondary education to a minority is also at issue.

Committee's report

Junior school streaming was first officially advocated in the *Primary School Report* of 1931.⁵

'One of the main significant facts revealed by intelligence tests is the wide range of individual differences between children and its steady expansion from year to year', states this Report. It goes on to prove this proposition by showing that in a normal group of 5-year-old children the range of mental age is from 3-7 to 8 years—'a total range of 4-5 years'. Unfortunately, the report does not mention that the age scale in which these differences are measured is purely an artefact of the particular tests used, and therefore that the word 'wide' is purely relativistic with no objective significance. After more reference to mental test theory, the section concludes by recommending 'a new way of grouping children'-i.e. streaming. Hadow re-organisation and the break at 11, the report argued, presented primary schools with heaven-sent opportunity for 'a more thorough classification of children. It is important that this opportunity should be turned to the fullest

account'. Though there is passing reference to the need for 'treatment of an appropriate character for the retarded child', it is clear that the report is particularly concerned about 'suitable arrangements for specially bright children'.

Inevitably, with the practice of streaming established in the junior schools, 11 + selection, which replaced the scholarship examination, soon became 7+ selection. Just as inevitably, the streaming hypothesis has gathered self-proving evidence—the arguments for streaming are reputed to be proved by the results, results themselves predetermined by the streaming process. Thus, head teachers produce as proof of the effectiveness and accuracy of their streaming the fact that only children from their A classes are selected for grammar school; therefore, they conclude, 7+ predictions have been confirmed and the procedure justified.

'Of course, we sometimes make mistakes, but we correct them by cross-transfer from stream to stream at the end of the year'-so head teachers often remark. The present writer (Daniels⁹), as part of a fuller investigation of the effects of educational segregation, asked 173 primary school teachers in the East Midlands to express opinions on the practice of streaming. One question asked them to estimate the number of children they thought ought to be transferred across streams each year. At the same time, information was collected as to how many children were in fact so transferred in the schools. Summarising the rather complex statistical results, it can be said that teachers, on the average, over-estimated the degree of transfer by about 400 per cent; that is to say, there were in fact only about a quarter of the number of cross-stream transfers that the teachers felt should be made.

Teachers' under-estimates

This under-estimate of the degree of cross-stream transfer is symptomatic of the extent to which teachers are deceiving themselves about the effects of streaming, the degree to which they see in streaming not what *is*, but what the theory of streaming would lead them to expect. When this investigation was carried out, junior school streaming was almost unchallenged in the schools, in fact 100 per cent of the teachers agreed with the policy. On the other hand, a detailed enquiry into the reasons for this support showed that the teachers (in contrast to the authors of the *Primary School Report*) thought streaming specially helpful for retarded children, the question of helping the bright to get on being a secondary consideration.

For some time it has been the approved norm to express concern about the backward child. It may be that the questionnaire reflected this normative opinion rather than any deep sympathy for the plight of the casualties of our education system. However, the present writer is convinced that the overwhelming majority of junior school teachers who support streaming do so because they honestly believe that it is the best way of preventing gross educational retardation, that it 'helps the slower children', that the less intelligent profit most by the system.

What are the actual effects of streaming? The conclusions of the researches that have been carried out may be briefly summarised as follows—some details substantiating these will be given later.

- 1. Streaming *lowers* rather than raises the average level of attainment of pupils in junior schools.
- 2. Streaming *slightly reduces* the level of attainment of 'bright' junior school children.
- 3. Streaming *markedly retards* the educational **pro**gress of the 'slower' junior children.
- 4. Streaming artificially *increases* the range of educational attainment of junior school children, i.e. widens the gap between the 'bright' and the 'backward'. (This, though independently demonstrated, necessarily follows from the first three conclusions.)

These findings of research are in such direct conflict with the claims made for streaming that it is important to analyse the theoretical errors which led to the justification of streaming as well as annotating some of the experiments upon which these conclusions are based.

'Homogeneous grouping'

Strangely enough, the first important studies of the effects of streaming were carried out in the U.S.A. 'Homogeneous grouping' as it is called in America is a practice which runs directly contrary to the historical development of the American common school. Indeed, it is still regarded today by most educationists as anti-democratic and in conflict with the fundamental tenet of the American Revolution that all men are born 'free and equal'. Consequently, when psychometricians began in the 1920's to advocate streaming it was against the prevailing current of opinion. A number of experiments were set up to determine whether homogeneous grouping was 'educationally advisable even if morally wrong' as one cynic put it.

What emerged was somewhat confused chiefly because of the artificial nature of most of these experiments. In general, however, the results do not substantiate the claims made for homogeneous grouping. Moyer,¹⁴ Cook,⁷ Purdom,¹⁵ Bonar,⁶ Gray and Hollingworth¹² and Woody¹⁸ all reported researches which, in a wide variety of situations, showed that no advantage was gained by homogeneous grouping. Billet³ published figures showing

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that at the 15 + level streaming helped the dull but slightly handicapped the bright. Barthelmess and Boyer¹ claimed to have shown 'statistically significant differences in favour of homogeneous class organisation in arithmetic, reading and technical English skills at all levels of ability'. (There is a full summary of these investigations in Daniels⁹.)

Cornell⁸, in a survey of these experiments, remarked that they were inconclusive but made an important point which was echoed later by Wyndham¹⁹ in a very important study. This is that it had sometimes been found that bright children under conditions of streaming gain more in attainment than similar children in heterogenous groups. Cornell asks whether this is not merely an artefact of the experiment and of the tests used to make the comparisons. For there will, he says, inevitably (even when an attempt is specifically made to avoid it) be differences in the syllabuses of bright and dull classes, and this may have a decisive influence on the test results.

The crux

This is a crucial point for it undermines most of the arguments used in England today in support of streaming. As we said above, the differences between A and C classes in the fourth junior year may very well merely reflect the fact that streaming was carried out in the first junior year and that A classes get A minded teachers and therefore A results, whilst C classes get C minded teachers, C educational aspirations and inevitably C results.

In England the self-proving nature of the streaming hypothesis was taken up with considerable vigour by Simon¹⁶ in 1953 in an all round attack upon intelligence testing and its practical effects. Since then, various research studies into the effects of streaming have been published. The first break in what looked like a conspiracy of silence by professional psychologists on the subject came with the publication in 1955 by Vernon¹⁷ of a 'finding of considerable interests to educationists'. This was to the effect that 'the quality of school', i.e. secondary modern or grammar schooling, is important in determining levels of I.Q.—'modern schools provide a poorer stimulus to general intellectual development than do grammar and technical schools'.

Following directly on this, the present writer (Daniels¹⁰) published results which showed that streaming in the junior school was having a similar effect—the A class environment stimulating intellectual development whilst the C class environment depressed it.

Next, Kahn¹³ showed that streaming at 7 + 'only very partially corresponded to measurable differences in intelligence and scholastic attainment', that is to say, there is a considerable degree of overlap of the streams in the first junior year. But, she points out, 'the effects of streaming and in particular the allocation to a "backward" stream are far-reaching and cumulative'. She makes the point that though promotion from B to A streams is possible, in practice it rarely takes place, a finding which would confirm those of Daniels quoted above.

Gatfield¹¹, in a very careful study, showed that the ranges in attainment in the various subjects in each stream of a primary school streamed by traditional methods 'is such that they cannot be regarded as sufficiently homogeneous to achieve the aims of streaming' as defined by the headmaster of the school he studied.

Results of streaming

An important thesis by a student of Vernon, Blandford² investigated the specific point made by Simon that streaming would tend to accentuate any differences of ability and attainment, initial differences which could be accounted for at the infant school level by a wide variety of facts, e.g. a spate of childish illnesses at an inappropriate time. Blandford compares 11+ selection results in small, and therefore unstreamed, junior schools with those in large streamed junior schools. By careful experimental design and a high degree of sophistication in his statistical treatment, he eliminated differences between the large and small schools other than those of size and therefore streaming. Blandford's results confirm the hypothesis that the spread of I.O.'s and attainment in one-stream schools is less than in multi-stream schools. For example, in one-stream schools, 24 per cent of the children had I.Q.'s over 115 whilst 7 per cent scored under 85. The comparable percentages for three-stream schools were 22 per cent and 16 per cent. Thus, Blandford not only showed that the spread of achievement is increased by streaming, but that this is accomplished by slightly retarding the bright children and considerably retarding the slower children.

Blandford, who one gathers from the thesis was a little disconcerted by the results of his own experiment, goes on to stress that the differences he observed, though significant, were small. He regards Daniels' results as published in the *Times Educational Supplement* as 'too large'. There is an important point here; Blandford in his investigation equated the unstreamed primary school, which is unstreamed because it is too small to be streamed, with junior schools which are unstreamed because the teaching staff believe that streaming is a bad practice which hinders the educational and social development of the children. Surely these are two very different situations. Most teachers in small primary schools believe that they are teaching under the handicap of having a mixed ability class and consequently adjust their teaching to minimise what they consider to be its baneful effects—they do not treat the unstreamed class as a unit, but stream within the class using group teaching, individual assignments and a host of other similar adaptations. What is perhaps surprising therefore is not that Blandford's differences are so small but that he was actually able to find the changes he reported.

But the definitive experiment comparing the intellectual and educational progress of children in streamed and unstreamed schools of equal size—and comparable in every respect other than that in one set of schools the teachers believe in the wisdom of streaming and in the other they believe that streaming is wasteful of intellectual resources—still remains to be carried out. A beginning was made in the present writer's study in which two streamed and two unstreamed schools were studied over a 6-year period. It is now known that several similar projects, at least one on a very much larger scale, are now being carried out.

Summary of investigation

We conclude with the briefest possible summary of the present writer's own investigations on the effects of streaming.

Two 3-class entry primary schools, where the headmasters had deliberately abolished the practice of streaming for a number of years, provided the experimental pupils—the unstreamed children. Two similar sized junior schools which carried out normal policies of streaming but were comparable with the experimental schools in most other respects (socioeconomic status of parents, age of buildings, L.E.A. etc.) provided the control pupils-the streamed children. Tests of intelligence and attainment in the basic skills were carried out in all four schools regularly from the time of entry to the junior school until the children left for the secondary school. These test results not only enabled the childrens' progress to be assessed regularly but also permitted, as part of the experimental design, the building up of numerous matched groups, i.e. groups of children in the two types of schools which were on the various tests 'initially comparable'.

Taking at random one example of 80 tables of similar construction (Daniels, p. 321) two samples of 105 children from a streamed and unstreamed school had exactly the same distribution of reading quotients on entry into the junior school. Both had a mean R.Q. of 95.88 and S.D. 13.6. In the reading test, given after one year of junior school education, the sample in the streamed school recorded a mean reading quotient of 95.79, S.D. 14.80 whilst the

sample in the unstreamed school had a mean reading quotient of 104.83 and S.D. at 14.28.

In one pair of schools, three whole year-groups were studied passing through the four years of the junior school and in the other pair of schools two year-groups only were studied over the 4 years.

All the results show a remarkable consistency. The example quoted above, which was taken at random and indeed is not a particularly striking one, shows the kind of results obtained with the reading, English, arithmetic and intelligence tests given during the investigation. In this example, the unstreamed classes had improved in reading by about 9 points of reading quotient whilst the streamed classes had remained more or less stationary. On the other hand, the dispersion of reading quotients of the streamed classes was, after one year, only greater than that of the unstreamed classes by 5 points of R.Q.

Expressing the results of another similar table, taken at random, in a different way we have the following results. Two samples of children were matched for reading on entry into the junior school. In the 11 + selection English test, $3\frac{1}{2}$ years later, $26\cdot5$ per cent from the streamed group scored 85 or less and 7.1 scored 114 or over. The comparable figures for the unstreamed school were $14\cdot2$ per cent and $13\cdot0$ respectively.

Typical results

These, it is emphasised, are typical results taken at random from a large number of comparable tables. In this experiment four schools were involved over a 6 year period of observation with detailed test marks gathered from over 1,200 pupils. Before we can be certain that these are the effects of streaming the investigation needs repeating in many more schools and there is every promise that this will now be done. But up to the time of writing it seems fairly certain that research has shown that streaming in the junior school is an unnecessary and restrictive procedure.

It is hoped that this brief account of research on streaming has not conveyed the impression that nonstreaming is a magic panacea for all our educational ills. The abandonment of streaming should be regarded not so much as a negative act of renunciation, but as a positive affirmation of how junior school education can most effectively be organised. Non-streaming to be successful implies that the staff believe whole-heartedly in the great potentialities for educational enterprise of all their pupils and a willingness to organise their teaching in accordance with that belief. In the school considered in the last investigation we described, the teachers had taken up definitive positions on such key questions as how Now available

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reading and mathematics are most effectively taught, the value of class teaching in a system of individual endeavour, the relative importance in the child's intellectual development of nature and nurture and how the positive assistance of parents can be enlisted to help children in their school work. In fact, nonstreaming to these teachers was only one aspect of a wider philosophy of education which placed teaching and the teacher at the centre of the educative process.

¹An evaluation of ability grouping. H. M. Barthelmess and P. A. Boyer (J. Ed. Res. Vol. 26) 1932.

²Standardised tests in junior schools with special reference to the effects of streaming on the constancy of results. J. S. Blandford (Thesis M.A. Ed. University of London 1957).

³ A controlled experiment to determine the advantages of homogeneous grouping. H. O. Billett (Ed. Res. Bull. Univ. of Chic. Vol. XII) 1929.

⁴Board of Education. Handbook of suggestions for teachers. H.M.S.O. 1937.

⁵Report of Consultative committee on the primary school. Board of Education, H.M.S.O. 1931.

⁶Segregation of ability group and achievement at firstgrade level. H. S. Bonar (J. Ed. Res. No. 6) 1922.

⁷A study of the results of homogeneous grouping of abilities in high school classes. R. R. Cook. (23rd Year Book, Nat. Soc. Study Ed.) 1924.

⁸Effects of ability grouping determinable from published studies. E. L. Cornell. (35th Year Book, Nat. Soc. Study Ed.) 1936.

⁹The effects of educational segregation. J. C. Daniels (Ph.D. Thesis Library Univ. of Nottingham.)

¹⁰ 'Sparing the intellect'. J. C. Daniels, letter in Times Ed. Supp. 1955.

¹¹An experimental investigation into certain aspects of streaming in a primary school. R. A. Gatfield (Ed. Dip. Thesis, Univ. of Southampton. 1958.)

¹²The achievement of gifted children enrolled or not enrolled in special opportunity classes. H. A. Gray and L. S. Hollingworth. (J. Ed. Res. Vol. 24) 1931.

¹³A study of the emotional and environmental factors associated with backwardness. M. Khan. (Thesis B.Sc. Econ, London University 1955).

¹⁴A study of the effects of classification by intelligence tests. E. L. Moyer. (23rd Year Book, Nat. Soc. Study Ed.) 1924.

¹⁵The value of homogeneous grouping. T. L. Purdon (Warwick & York, Baltimore).

¹⁶Intelligence testing and the comprehensive school. B. Simon (Lawrence and Wishart) 1953.

¹⁷Spurring the intellect—effect of school. P. E. Vernon (Times Ed. Supp. 1955).

¹⁸The advantage of ability grouping. C. Woody (Bull. of school of Ed. Univ. of Indiana. Vol. 3).

¹⁹Ability grouping. H. S. Wyndham (Melbourne Univ. Press) 1934.

Some Impressions of Jean Piaget and his Work

ERIC LUNZER

E. A. Lunzer is Lecturer in Child Psychology in the Department of Education, Manchester University. Previous to this appointment he taught in two junior schools and at Sheldon Heath Comprehensive School, Birmingham. During the session 1960-1 he was a member of the Centre International d'Epistimologie Genetique in Geneva, directed by Jean Piaget.

Some eighteen months ago I was fortunate enough to receive an invitation to spend a year in Geneva in order to assist in the current research programme under the direction of Jean Piaget. Because of the rapidly growing interest amongst teachers I have been asked to record something of my impressions of the man and his work.

First, as to the man. Piaget is not nearly as ancient as might appear from the fact that he first came to the notice of British readers over 30 years ago, when Susan Isaacs drew attention to the far-reaching implications of his views and criticised some of the shortcomings of the experimental methods which he was using at the time. As is known, interest in this work rather died down in this country over more than 20 years, until, with the appearance of his work on Number and the National Froebel Foundation's résumé, ever-increasing numbers of teachers and educationists have begun to feel that here is something which may provide an invaluable theoretical framework for a 'child-centred' approach.

By this time, the list of Piaget's publications had grown to considerable lengths—quite apart from the fact that they make very difficult reading—so that it is usually more convenient for the non-specialist to seek his introduction through the medium of an interpreter (e.g. Peel, Nathan Isaacs, Lovell, etc.).¹ For all these reasons, it is hardly surprising that the name of Piaget tends to suggest a rather legendary figure who properly belongs to the remote past (in time, and space, and comprehensibility), even if what he has said may have some implications for the present.

The man and his work

In actual fact, Piaget is less than 65 at the time of writing, and very alive and very human. His broad brow and his flowing white locks (which I rather think he acquired about the age of 35), his massive meerschaum pipe and his twinkling eyes help, no doubt, to create the public image of him as a philosophical and educational seer. And like all who have a 'public image' which very largely reflects something of their positive achievements, Piaget is probably quite happy with it. But he is still a very dynamic personality. He still spends a large number of hours each day writing books and articles rather faster than the average reader can digest them, and he continues to direct personally the vast amount of research on which these books are based. Above all, he believes very strongly that much of his work remains to be done, before the idea of a developmental theory of knowledge and of thinking has acquired a sufficiently solid foundation to be translated easily into educational and clinical application and to open the way to new avenues of research.

In spite of this, or perhaps because of it, he is still very approachable, and, what is rather unusual (of this I have personal experience), he generally finds the time to tolerate fools gladly.

The Clinical Method

I have said that Piaget personally directs the investigations which continue to be made under the auspices of his institute. He does not carry out the enquiries himself. Nor could he. That is because the problems with which he is concerned cannot be studied except by means of the 'clinical method' which he developed many years ago. This is a laborious and time-consuming business and can only be done effectively by a team of research workers. The aim of the clinical method is to analyse the way in which children tackle problems at various levels of development. This is not a matter of teaching them answers, although what we can learn about the way in which they see the questions tells us a good deal about what kinds of knowledge they are ready to assimilate and what may be the best ways of introducing these to them. But it is also not a matter of setting 'tests' to discover what answers they already

¹Any of the following might serve as a useful introduction: E. A. Peel, The Pupil's Thinking; K. Lovell, The Growth of Basic Mathematical and Scientific Concepts in Children; E. A. Lunzer, Recent Studies in Britain based on the Work of Jean Piaget (N.F.E.R.); N. Isaacs, The Growth of Understanding in the Young Child.

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know, by virtue of their maturity and past experience. It is much more a matter of setting situations which are new and demand some sort of solution, and analysing their reactions to see how far they see the problem in the same way as we do, and how far they try to solve it in a manner which suggests that they are looking for the same *kind* of solution.

An example can make the point clearer. Most readers will be familiar with the 'Matrices' type of test. Typically, the subject is shown, say, three diagrams arranged in such a way that they would fill the four corners of a square if a fourth were added. For instance, one might show him a red square in the top left hand sector, a green square in the top right hand sector, and a red circle in the bottom left hand sector; the remaining sector would be left blank. He is asked to choose among various alternatives which diagram should be used to fill the empty cell. The answer is a green circle. But there are two ways of arriving at this answer: one is to look at the balance of the figure as a whole; the other is to analyse the properties of each of the given elements. If a child is reasoning it out, he can explain that the left hand column is all red and the upper row consists entirely of squares, so the right hand column will have to be all green and the lower row must consist entirely of circles. At the very least, he will refuse to allow the suggestion that we might substitute another red square, or a different figure altogether, once he has chosen the green circle. But the child who is thinking in terms of overall balance cannot analyse the reasons for his choice, and he is easily persuaded to change it for something equally pretty. These problems can, of course, be made much harder.

Qualitative investigation

If all we want to do is to test the child's 'intelligence' in relation to an overall standard set by his age peers, one way of going about it is to compare his overall score with their average. The teacher can then be told, if necessary, that he is dull, a 'slow learner'; he can, therefore, be placed in a lower stream or group where less will be expected of him. A mere quantitative assessment does not carry the necessity to know how or why a child arrived at a particular score. At the same time, it tells us very little about how we can set about improving the standard of his performance. On the face of things, it is useful to the administrator who wants some way of classifying children. In practice, most readers of FORUM will agree that its imperfections outweigh its advantages. It is of no help whatsoever to the teacher who wants to teach children, because it tells us nothing about how they learn.

Both the psychologist and the teacher want to know more about a child's performance in relation to this sort of problem. We want to know whether he is in fact abstracting the relevant features of these diagrams, and whether he can compare them with one another. We also want to know under what circumstances we can facilitate the task for him and lead him on in this direction, because we are aware that part of our job is to help children to think things out for themselves in an objective way, and this means sorting out the significant features of things and weighing them up against one another. But this means asking a great many supplementary questions, and testing the effects of various control situations. It is no use asking the child directly how he is thinking, or at least it is not enough, because usually he cannot explain. That is why the testing is 'clinical'.

A medical practitioner does not ask us directly whether we have jaundice or diarrhoea or dysentry, and if he did we should not be able to tell him. Instead he enquires about our symptoms and ascertains how far they agree with one or another of these possible diagnoses. But without his medical training he would not know what symptoms to ask about or what diagnoses may be suggested by a given clinical syndrome. In much the same way the psychological clinician, even if he is largely concerned with cognitive development, must through his training have acquired some insight into the kinds of thinking he will be looking for, because these direct the kinds of question he must ask, and the kind of experiment he will need to carry out.

In practice, every enquiry with every child is apt to take half an hour and sometimes considerably longer; and many such enquiries must be made before something new is learnt about their ways of tackling problems. These enquiries are usually made in Geneva by assistants who have considerable experience in this type of work, and they in turn train students of psychology to help them. It should be clear from the above that these investigations do not amount to a new and better form of 'test'. They are different in aim and in content and in method.

Stages of Development : Continuity or Discontinuity ?

Most readers will be familiar with the fact that Piaget has put forward the notion that cognitive development passes through a number of more or less clearly definable stages. I have not the space to describe these adequately and must refer once more to the textbooks listed in the previous footnote. Here is a list of the principal stages in so far as they apply to children of school age. Announcing the first six books of

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I. An Intuitive Stage. Children are largely under the influence of perceptual appearances and comparisons. Much of their thinking is limited by subjective or 'ego-centric' circumstances which prevent them from sorting out the most significant and objective features of a situation. They can make comparisons and they can imagine 'how things would be if ...' but they cannot co-ordinate several comparisons or resolve contradictions, nor does their intuition of 'how things would be if ...' lead them to alter their impressions of 'how they are since ...'.

A Concrete Stage. Children co-ordinate their II. impressions in such a way as to resolve contradictions. They fasten on invariants like number, spatial dimensions, temporal and other sequences, all of which can be defined in such a way as to make the way things are agree with the way they were when . . . and the way they would be if . . . In other words, they look for the most essential properties of things which are also those which change lawfully when we do certain things (e.g. the number of a collection is less when we take some members away) and which do not change when we do certain other things (e.g. the number is invariant whatever the spatial arrangement). They can classify and order things in terms of such properties and so explain why they behave as they do (e.g. many solids liquify when heated; lighter objects will float on water, and so on). But their reasoning is still 'concrete' in the sense that these properties directly characterise concrete things, and can be easily related to their appearances by an appropriate sequence of actions (e.g. counting, weighing, measuring, classifying, etc.).

A Formal Stage. As they approach the years III. of adolescence, so children begin increasingly to overcome these limitations of the concrete. They learn to frame hypotheses as to *possible* causes and deduce what would be their effects: what would be ruled out, what would be inevitable, and what would remain contingent. They can verify, accept, reject, or supplement such hypotheses. They can see their way to reasoning in terms of relational properties which go far beyond perceptual appearances: proportions, probability, derived calculations like heat, specific gravity, displacement volume, and so forth. Their reasoning is less bound by the need for direct termfor-term comparison with a visible reality. It is at one remove or more.

Very generally, stage I lasts from 4 to 5 or 6; stage II from 7 or 8 till 11 or 12; stage III hardly begins much before the age of 13. But this means that the periods from 6 to 8 on average, and from 11 to 13 are transitional. It is often said that development is continuous and the notion of stages must therefore be ruled out. But no-one seriously suggests that it is

any other. The question is whether certain phases of this development are relatively stable, and development relatively slow, while at some points there is uncertainty, disequilibrium, and development tends to be more rapid. Discontinuity can only be relative.

A more serious criticism is that the spread, or variance, of measured development in terms of I.Q. or mental age lends no support to the idea of stages. My own feeling is that this is due in part to the way in which such tests are constructed. A test is made to *sample* performances which are most commonly acquired at 6, or 7, or 8, or 9, etc. And it is convenient to take equal samples at every age. What Piaget's work suggests is that if we were to look at the range and scope of performances from which these samples are taken, we are likely to find both qualitative and quantitative differences. One further point needs to be made. If the range of performances of which children are capable shows certain discontinuities, it by no means follows that the maturation of the nerve cells in their brains must proceed in a similar manner. Indeed, once again, what is known about variability at different ages suggests the contrary. But an anatomical and physiological development which is uniform may still give rise to qualitative changes in performance, according as it opens up new circuits and possibilities of organisation in the course of its evolution.

Educational Implications

Lack of space compels me to be brief. I will therefore confine myself to listing five points for consideration.

(1) The clinical method of Piaget and the findings which it has made possible point to the inadequacy and artificiality of conventional 'tests', conventional notions of 'intelligence', and the dangers inherent in categorisation of these terms. In this sense they corroborate the growing doubts in the minds of teachers and even of administrators.

(2) An extension of the clinical method to the sorts of things which teachers are trying to put over in the classroom at any given time cannot but contribute to an enhanced understanding of the difficulties they may have to overcome. This is a matter of a detailed analysis of the kinds of insights their pupils already have, the kinds of relationships they have already established, and at the same time of assessing what insights and relationships they will need to acquire before the teaching is done.

(3) The actual experiments devised by Piaget and his school and the interest which they hold for children are abundant testimony to the fruitfulness and limitless possibilities in helping children to 'discover for themselves'. But they also suggest what (continued on page 105)

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Associations for the Advancement of State Education

ANN WIARD

Mrs. Wiard has taught in various types of secondary schools in Scotland and England and now teaches French part time in a Cambridge village college. She took a leading part in the formation of the Cambridge Association for the Advancement of State Education, and describes this new movement here.

'It has been comparatively easy to mobilise support for rising expenditure on education while we were putting roofs over the heads of the children of the bulge. Will it be so easy to retain this support when quality replaces quantity as first priority?

'I am optimistic about this, provided that at all levels and with undiminished enthusiasm, the policy makers and those who work in the field keep together as would old friends at some exacting period of their lives, remembering that an effective demand for better education comes from the parents themselves and cannot be imposed from Curzon Street or from any county or town hall.'

So wrote our present Minister of Education in his article on Education and Government for the special Jubilee supplement of *The Times Educational Supplement* in December, 1960. At the time, unknown to him, parents and people full of concern for the maintenance and improvement of standards in all State schools were rallying interest in the formation of an association for the advancement of State education. His words ushered in the event. Cambridge provided the setting, and the county authority, which had realised the dreams of Henry Morris by providing Village Colleges, witnessed the growth of a nucleus of dissatisfied observers of the State educational system.

Reactions to the rates

In the autumn of 1960 I was one of a trio which was eager to unite those who were dissatisfied with the amount of money spent on State education and who questioned some of the aspects of educational policy. Ever since the publication in 1957 of the Government White Paper on Local Government Finance, I had been concerned about the probable effect of the general grant on educational spending by local authorities. The main aim of the proposed changes was to increase the independence of local authorities in the raising and spending of their money. But the general grant was not welcomed by educational opinion. What degree of independence is possible with a sparsely filled purse? Many more parents are encouraging their children to stay on at school after the statutory school-leaving age, but many others fail to get the education they would like for their children, because education itself is beyond their experience. Many of these people will not be immediately persuaded to sanction an increase in the rates until it seems likely that a wider choice of schools will be made available to them.

The situation elsewhere

When reading about education in the Netherlands. I had found that the Dutch educational system recognises the rights of parents in a way not yet possible in this country. In Holland, unfortunately, the situation arose because of religious differences. and 'free' schools are established when a required number of parents declare that a desired type of education is needed for a certain number of children. There are safeguards both for the parents and the management, and the ownership of the school passes to the municipality if the parents cease to make use of such a school building. This happy precedent augurs well for men and women in this country eager to provide opportunities for different types of schools and for experiments in new methods of teaching. At the same time it is disheartening to realise that though new schools are being built in this country and more money is flowing into educational coffers, nevertheless classes by 1970 will only have their numbers brought down to statutory size (30 in secondary school classes and 40 in primary schools) if a highly ambitious scheme to recruit teachers meets with success.

Quis custodiet ipsos custodes? is a question to be ever in the minds of those who would yet see the 1944 Education Act transformed from an ideal to a reality. Misgivings and dismay had arisen in Cambridge when in April, 1960 the rate had been reduced, so cutting educational expenditure that year by £75,000. By a majority of two votes, county councillors had indulged in such short-sighted economy. Concern was felt for the schools and services to be affected by this decision, and one of the councillors voting for this reduction was indeed a member of the Education Committee. Deep was the hope that a local response to an appeal for help and support from others equally concerned would one day have national repercussions. I am one of many in Cambridge who have lived in various parts of the country. Statistics had but often confirmed what I had seen of the plight of the pupils and staffs of schools in areas of far greater need.

Candidates and campaigns

Several national newspapers and magazines have reported the early meetings in Cambridge. Local publicity was received after letters had been sent to all County Councillors, recalling the vote of the previous year which had reduced the rates at the expense of school requirements. Some citizens were alerted to the need for vigilance. A country wanting to produce citizens of no mean state should not balk at the prospect of devising a scheme to free elderly ratepayers from paying higher rates to meet the bill for national education. More constant knocking is obviously needed at the Treasury door. During February, 1961 at the 'budget meeting' of the County Council, an attempt was made to reduce the rate by sixpence. This failed, and several councillors spoke of the association and of its impact. County council elections loomed ahead and a decision to oppose two councillors was endorsed by members. Two members of the association stood as Independent candidates; it was considered vital that the needs of State education should constantly reach the public ear. A spur to our efforts was the fact that the two councillors to be opposed had shown that they were no enthusiasts for State education. Both candidates led strenuous campaigns and one was fortunate to be elected and was chosen to sit on the County Education Committee. The election address of one of the opposed councillors revealed an interesting, if belated, bias towards helping State primary schools. In another City ward, one member ran his own Independent campaign and his opponent devoted half of the election address to concern with education; a year earlier this same opponent had voted for a reduction in the rates.

Meetings of the City and County Education Committees are always attended by a member of the Association (press reports are often scanty), and the members' Bulletin gives full accounts of local affairs. A discussion group is considering alternative systems of secondary education in England and Wales. We may not all agree with Professor David Glass that 'for middle-class parents, in particular, eleven plus day is a day of national mourning. Like Late May

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King Aegeus, they sit on the cliffs, waiting to see if the returning sails are white or black'. But Dr. Wall of the National Foundation for Educational Research has recently estimated that the annual total expenditure on empirical educational research in the United Kingdom amounts to but £125,000; not without reason does he say, 'Daily we take decisions involving the lives of children and the very future of society—as well as millions of pounds —on no better than guesswork, prejudice or pious hope.'

Conditions in local schools have been investigated and a detailed report of one primary school (which would not convert any Minister of Education's audience to the benefits of English primary education in State schools) was sent to each member of the City Education Committee. The matter was fully discussed, but whether the school will retain its place in the queue for the major capital works programme of 1963-1964 is highly doubtful, and it was in 1954 that the proposals for rebuilding part of this school were first deferred!

Press publicity

Mrs. Dinah Brook, the educational correspondent of the Observer, asked for news of the Association in April and agreed to attend a meeting during May. Her appraisal of the developing Association, its ideas and purpose, was printed in the Observer during the next month, and, as a result, sympathetic enquiries reached Cambridge from all parts. National members now paid subscriptions which entitled them to receive detailed information of the background and growth of the Association in Cambridge, and the idea of a national news-letter was born. Many replies were concentrated in the London area, and several had come from Oxford. In the autumn, speakers from Cambridge addressed meetings in Oxford, Richmond, Hornsey and Chiswick, and in Chester a foundation meeting was held in October.

Associations formed later include Hampstead, Harrow, Keighley, Blackheath, Henley, S.W. Herts, Northampton, N.W. Middlesex, Wall Heath in Staffordshire, and Wood Green. Before this article sees print, inaugural meetings will have been held at least in Croydon, Denmark Hill and Hemel Hempstead. The ball seems to be rolling in the London area, and the Government proposals for the reorganisation of local government areas may have speeded its journey On the basis of subscriptions, the largest associations are now Hampstead, Richmond and Barnes, Chiswick, and Cambridge.

The Hampstead Association is studying the new White Paper on London boroughs, and Stephen Swingler, M.P., has explained the way Parliament handles educational matters. In Richmond, great anxiety has been felt about the Surrey plan to reduce grammar school entry to 10 per cent and to provide Modified Comprehensive Schools for 90 per cent of the children. At a recent meeting the Chief Inspector for the County, Dr. Marston, most ably expounded and defended Surrey's aims and reasons behind its policy. The Chiswick association has corresponded with the Ministry of Education on matters arising from the economy building measures of Autumn, 1961. Members of the Blackheath Association had a most helpful interview with the Chairman of the L.C.C. Education Committee, the Vice-Chairman, and the Assistant Education Officer. The latter agreed to supply information, and thought that the Blackheath Association might help by supporting their efforts to extend nursery education. The Hornsey Association is arranging for members to visit all the schools in the Borough of Hornsey. At a recent meeting the Director of the Advisory Centre for Education outlined the history of the Centre, and members reacted favourably to the idea of 'Corporate membership' of A.C.E. A formal decision will be taken at the forthcoming A.G.M. The Oxford Association is also arranging visits to schools by arrangement with the head teachers, and is investigating methods of co-operation with the Advisory Centre for Education. A report on secondary education was produced by the Chester Association, and this revealed that Chester compared unfavourably with other authorities in the provision of grammar school places. It seems that the discrepancy will become greater, as there seems no reason to doubt the steady growth of the city's population.

The Advisory Centre for Education

Most of the readers of FORUM will be aware of the activities of A.C.E. and of the new policy announced in November last of beginning a sustained campaign for education locally and nationally. Since then, its members have been asked to explore the possibilities of forming local associations for advancing State education; N.W. Middlesex and Keighley have founded associations as a result and others are being formed. Hampstead and Cambridge are now corporate members of the Advisory Centre for Education. A national enquiry which aims to provide schools with information about parents and their educational views has now been completed by the Advisory Centre. Its publication is anticipated and perhaps many parents who contributed their views will join an association in their district or will set one afoot.

After a preliminary meeting in January, delegates from eleven associations met on February 4th to (continued on page 107)

MASTERS OF CRAFTS

At a recent conference it was suggested that this country should have technological universities. Will undergraduates carrying both kinds of mortarboard repair crumbling colleges as part of their practical training? Will degrees be awarded to bachelors and masters of crafts? At any rate emphasis on technology is increasing in the educational system that serves our highly industrialised society. Up-to-date technical books are required and, as one of the publishers who aim to serve the educational system, Hutchinson have set out to provide them—practical, well illustrated texts by experienced teachers, produced as economically as possible without sacrificing quality.

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Discussion

Experiment in Freedom

Mr. Baker raises some fundamental matters in his comments on my article in FORUM (Vol. 4, No. 1) on an experiment in freedom in a junior classroom, and I acknowledge how pertinent they are. In a limited space it is impossible to deal fully with them, but I shall comment on salient points.

How do children acquire the basic skills under free conditions? The teachers from Infant level on 'teaches' them, of course, but not necessarily or solely in a formal manner. Some children learn some of their reading at home, for example, and are sufficiently in advance of the 'expected' level of their class to be left with plenty of good books only to *consolidate* their reading in school. Others may need to be taught at all stages. Here group work is effective and is widely practised.

In my own class of fourth year juniors, I verified the 'reading ages' of the class and grouped half a dozen or so who were retarded, ensuring that at some time each day they had a practice with me, in the corridor, in the storeroom or anywhere a circle of chairs could find accommodation.

Number work is a very difficult problem since no reputable educationalist can now say what level of numeracy a young child should be expected to reach at a given age or what amount of operational procedure he needs as a child. We await a deeper understanding of Piaget's work and the ensuing construction of modern conceptual tests to cope with that problem.

I contend that, in a free and enriched environment in school, the normal youngster would want to know how to read and to work out mathematical ideas, for both needs are created by the demands of the environment. But the teacher can still decide at what point a general problem needs formal class treatment.

I cannot accept the theory that, because the reality of life is often unpleasant, we should give the children a foretaste of it. There are interests enough in the whole field of knowledge to occupy all children in work they like doing if only we had classroom conditions appropriate to this noble aim. Whether Mr. Baker likes it or not, the formal concept of education fits in nicely with the policy of those who believe in 'education on the cheap'.

Of course, my conscience nagged me about the limitations of my children. An experiment of this kind is against tradition and the baleful eyes of woeful critics would spot straight away that 'free' children choose not to do 65 or 165 futile 'sums' each week (half of them wrong, or, even worse, all of them right) or pages of insincere writing on 'The day Daddy gave me a pony' or whatnot.

An experiment by definition can fail: I believe mine succeeded in large measure.

What evidence? The one bit which I did not include

in my article was that one of my pupils actually got a grammar school place (if that is an acceptable criterion of success). It was unheard of in that school for a child classified as 'B' to achieve what a half of the 'A' class failed to do. For Mr. Baker's information, she happened to have an undiscovered ability to write (when freely allowed to do so) and she spent much of her time before the 10 plus in writing, illustrating and binding a book, a task she occasionally left on her own accord to prepare some puppetry or to do a few sums 'just for a change'.

I will not be drawn to comment on methods I think appropriate for secondary level. My experience and experimental work was with juniors. It would in my view be totally unacceptable for the junior school to allow its work to be dictated by secondary needs. The logic of that leads to the domination of all education by university needs, a trend we should all resist.

Let the secondary schools meet the challenge of modern methods as the primary schools are gradually doing. It is significant that even a forward looking journal like FORUM has nothing to say on this point in the last special number on the Secondary Modern school. G. PRICE,

St. Katharine's College.

A Step Backwards

At its first meeting in 1962, Essex County Council decided to reintroduce the full 11 + in Harlow. This astonishing decision made headlines locally but passed unnoticed in the national press. Yet it was a most retrograde step. The Harlow Urban District Council, its appeals at County level ignored, appealed to the Minister of Education. This appeal has now been turned down, on the grounds that the decision to re-apply the full admission examination to Harlow schools had only been taken after all the arguments for and against had been carefully considered.

It is difficult to believe this; after reading all the published relevant facts, one is bound to conclude that no arguments in favour of the 11 + exist. It is simply a device to ensure that approximately 20 out of every 100 children secure a place in a grammar school. In Harlow there is no specific need for selection. There are no tripartite-type schools, All the secondary schools are bilateral and all offer a broad education leading to all types of careers and professions. All the children of secondary school age in Harlow go to these schools, whether they pass the 11 + or not—with the exception of a small group whose success at obtaining high marks in the 11 +, together with their parents' wishes, secure them a place in a grammar school outside Harkow.

In 1961, a modified 11+ procedure had been introduced as an experiment affecting Harlow alone. Parents could still insist on their children taking the full 11+ if they wished them to be considered for a place in the tripartite scheme of education existing outside Harlow. But very, very few parents chose to do this. The majority of Harlow's 11-year-olds passed on to secondary schools in Harlow in 1961 without sitting the Arithmetic and English papers which formed part of the full 11 + elsewhere in Essex. This experiment was being watched with interest by the local branch of the N.U.T. which, for two years, had been studying the secondary schools and the 11 + in Harlow, quite independently, and had sent recommendations to the County Council suggesting, among other things, the abolition of the 11 + for an experimental period of five years.

If, after one year, the County Council ends this experiment and re-introduces the full 11 +, against the wishes of local teachers, councillors and parents, and without any assessment of the success or failure of the experiment, one is bound to conclude that the bitter wrangling which goes on at County level between Conservatives and Socialists must be behind this decision, for locally all parties are appalled by it. The local N.U.T. wrote to each member of the County Council, urging that further opportunity be given to the experiment. An official poll of Heads of schools produced a majority in favour of the experiment—indeed, in the case of the secondary schools, the majority was four to one.

Yet at County Hall, councillors who did not represent Harlow and who seemed from their comments to know little of anything about the schools, urged the reintroduction of the full compulsory 11+. One argument heard was 'Harlow parents should be able to enjoy the same advantages as parents elsewhere'. This is the first time I have heard the 11+ held up as an 'advantage'. Another councillor commented, 'This experiment in modifying the 11 + needs to go on for five years to be judged properly. As it has only been going on for one year we are going to abolish it now." Is it surprising that the public concluded that the County was afraid of the experiment being so successful and so popular in Harlow that other areas would demand similar opportunities?

On being told by Harlow councillors of the local schools' successes in sending on to higher education children who had not originally passed the 11+, one councillor commented on the inadvisability of this kind of thing as it tended to clutter up the universities with men and women of mediocre ability.

It is a shattering blow to educational progress. In so many areas in England it is very difficult to make advances and experiment in education is hampered by existing local prejudices and old-established grammar schools with traditions and ties locally. Here in Harlow nothing impedes experiment and progress but the attitude of Conservatives who do not even represent the town. Surely there is a case for the Minister of Education to take more than a passing look at the situation.

SHEILA HILLER.

Reflections on Teaching World History

In 1960 was published E. H. Dance's *History the Betrayer*, a fascinating short study of some of the defects in history syllabuses in England and elsewhere in Europe—along with suggested improvements. Among other things, Mr. Dance made a strong plea for the teaching of world history, the most powerful such plea to be made to the general public in recent years. The movement for world history is growing, strongly supported by UNESCO and in Britain by many official and unofficial bodies.

At first appearance the case for the prosecution is a very strong one, based upon the need to eradicate prejudice and parochial attitudes, and thus to bring a divided world closer together. It is hard to deny Mr. Dance's central point: 'Beyond eastern Europe lies a whole Orient of mighty peoples with an incomparable past about which western Europeans know nothing at all. It is in the East that most of the civilisations of the world have been born and flourished ... The time has gone by when ... nine-tenths of the history taught can safely be devoted to a quarter of the world's inhabitants.'

And vet . . . right as all of this seems, and ashamed as most of us must be of the vast gaps in our historical knowledge, the arguments of the world historians just do not ring true. In shortest form, teaching world history as such is neither practicable nor advisable. Consider the nature of history teaching in most secondary schools. We have two or, with good fortune, three periods each week. In the first three years in a secondary school most of us start at the dawn of time and try, by hook or crook, to reach some date near 1815 by the end of the third year. Many history teachers feel that pupils have difficulty in digesting all the history which is thrown at them now. Suppose we widened the syllabus to include the whole world? Doubtless this would be a very good thing for the teacher, but how much would the children learn, when we have not even time to explain properly the causes of the English Civil War?

This brings me to advisability. In the United States, World History is often 'studied' in a year or two, a period each day. In my experience very little is learned in this way; a horde of facts, concepts and trends are thrown at bewildered children who learn relatively little of anything. Even if Heads were to experience a sudden (and much to be desired) conversion and to allot us five periods a week, I should not like to broaden the syllabus so vastly. Based upon experience, I feel that the children could not with profit absorb such a course, worthwhile in principle as it seems to be. When I first began to teach I was shocked to see how narrow a range of history English school children were taught; now, however, I feel that a relatively narrow range is virtually unavoidable.

This is not meant to be a counsel of despair. The problems analysed by Mr. Dance and others are certainly important ones, and their solutions merit serious consideration. The following tentative conclusions are based upon teaching children in comprehensive schools.

First, teaching mainly English history need not produce only chauvinists or xenophobes. One could argue that English history contains so many black spots and such a record of iniquity that its study would lead to Anglophobia! Be that as it may, it is surely our job as teachers to put forward different points of view, to show that history is not what happened but what men say has happened. We need to point out opposing points of view held in different ages, countries and classes. Our methods of teaching undoubtedly influence our pupils as much or more than the subject matter. As A. J. P. Taylor said in reviewing Mr. Dance's book: 'It would be more useful educationally to present schoolchildren with two, or more versions in violent disagreement; and leave them to make up their own minds . . . What we need is more chaos, more disagreement . . .

Second, our history is already far from being entirely England-oriented. Most heads of departments whom I know devote much of the first year syllabus to early man, Egypt and Mesopotamia, Persia-as well as to Greece and Rome. In subsequent years stress is usually placed upon the Crusades, the Renaissance and Reformation, the Discoveries, Louis XIV and Peter the Great, the American Revolution and Civil War, Imperialism and nineteenth-century Europe in general. In modern history we inevitably discuss countries situated all over the world, and the Russian and Chinese Revolutions and the ending of old-style colonialism will obviously become increasingly important. In other words, if our history is mainly centred for reasons of time and comprehension upon this country, we are forced for comprehension's own sake to range far afield, without systematically learning world history in which each country would have its mathematically allotted place and time.

Third, Mr. Dance's strictures seem to me more applicable to training colleges and universities-or to sixth forms, freed from the iniquities of our present examination system. It is then that the student is more able and better prepared to learn on a wider scale, and to assimilate the vast amounts of history laid before him. If all students of history compulsorily learned world history as well as engaging in a special study of the twentieth century, how much better teachers would they become! It is in large part the personality of the teacher which impresses the pupil, and if the former is free of the worst aspects of provincialism and prejudice he is likely to have a favourable influence upon his pupils in the sense of broadening their outlook and internationalising their sympathies.

In sum, world history is no panacea. It is easy to see how it also can lead to prejudice and lack of understanding, as well as to far too diffuse and superficial a field of learning for the immature mind. Not that most history teachers are satisfied with existing syllabuses, which are often out-of-date and wrongly based, as Mr. Dance shows. But to scrap what we have in favour of so vast a change would be a step which would cost us much of our present strength for no certain or even DAVID RUBENSTEIN, likely improvement.

Abbey Wood School, London.

Teachers Required

The basic requirements of the secondary modern school can be stated simply, placard-wise : "We want TEACHERS ! We want ROOM !" All else, desirable though it may be, is subsidiary to this.

We want teachers. Teachers of quality. As Dr. C. M. Fleming reminded us some time ago, it is the quality of the teacher that is in the end decisive. Be they graduate or 'graduate-equivalent'-a horrible term, suggesting something ersatz, like an academic turpentine substitute-they must be professionally trained to the realities of their vocation, and selected from those who have something additional to offer, breadth of background and outlook, and purposeful in character. Specialists we still require, but a greater number skilled in the basic classroom subjects. We need those who, gladly, can satisfactorily fulfil the general educational needs of the average, and less than average, child. And in this matter we find fault with those teacher-training colleges and departments who encourage students to offer such pleasing adjuncts as Drama or Movement as their specialist gift to our schools, but who are lukewarm or dubious about their ability to offer English generally at any level.

In his Educating One Nation, John Sharp posed the question "Who are the neglected children in the nation's schools?" And in his answer he maintained that it was those children in the second quarter of the intelligence range, and in that quarter was our biggest untapped source of real ability. In the more progressive of our secondary modern schools, and in the comprehensive schools, these children are now being given their opportunity, and their ability is being sought and often found. Such schools can, even in these difficult days, often attract capable senior staff who will have the greater charge of such children. But within the secondary modern schools specifically it is lower down that the real neglect lies : in, say, the fourth stream of five, or its equivalent. The 'backward' class or remedial group is now commonly regarded as a specialist problem, and treated as such, often admirably so. It is in the class or group above, the 'lower than average' class, which needs its well-trained general subjects teacher of calibre to guide it and drill it in the basic concepts of the classroom and equally to be a father- or mother-figure to influence its members towards the paths of right behaviour and good citizenship. For it is in this group that the apathetic, the idle, the drifters disproportionately congregate : those who often could do more, in school and in life, but will never do it initially of their own volition. Here is an urgent target at which much greater effort should be expended by those in charge of the training of teachers for the general secondary schools.

There is, however, one existing source of qualified teachers which would slightly alleviate our present position-a restriction on the staff-pupil ratio in the public and private schools comparable to that which exists in the equivalent state schools. Less cake for some, more bread for others! Special consideration could be given to particular circumstances, as with our own special schools. And this might be one step towards a unity of the two systems and another towards accelerated progress together. If Winchester and Harrow had the same teaching staff/pupil ratio as Industrial Street Secondary Modern, there would undoubtedly be some mighty powerful voices raised for greater progress in matters educational—much to the increased advantage of Industrial Street and its thousands of counterparts.

Secondly, we want room. More classrooms and activity spaces, and less pupils crowded in them. And in this matter we must charge our administrators in many authorities with Micawber-like neglect in fore-thinking and fore-planning. The shortage of sufficient teachers of quality can be laid in the lap of successive governments, in their failure to create a proper supply of adequately paid teachers : local administration must be held guilty of failing to provide the necessary class-rooms and facilities, or of acquiescing to the over-crowding of those it had. Whether central or local government omission was the mainspring of our plight today is open to question : perhaps the problem is comparable with the age-old riddle of the hen and the egg. What is clear beyond dispute, however, is that our teeming thousands wre not born aged 11+, clamouring at our gates to come in; but they almost might have been so, for the lack of increased secondary provision made for them in some areas. After sixteen years post-war, and post-effective 1944 Act, secondary classes of maximum 30 are still an educational luxury rather than expected normalcy.

These are our basic needs. Following on behindsome even accompanying them-are other requirements. If we are to receive the oft-quoted 'parity of esteem' there must be 'parity of provision'. Parity of staffing ratio, of equipment, of facilities. True, the selective school sixth form groups need to be small, and to have special equipment and space in which to work. But do not remedial groups and 'backward classes' need these advantages even more? Or is their individual wholeness to be disregarded, and their crying individual needs ignored or lost in the mammoth class? If the special top end of the selective school calls for consideration of this kind, so does the special, academically lower end of the secondary modern school. Equally, in the secondary modern schools, is there a call for more equipment, not least for the out-of-school-hours clubs and activities-music and drama, art and the crafts. For such as these may be their likeliest roads to culture, or to good use of leisure.

Now to ourselves. Are we attuned to what can be done in our own schools? Are there not too many of us still doubting the capabilities of our pupils, in study and in constructive achievement? We have a duty to experiment, to lead and, if needs be, to drive our pupils and persuade our colleagues. There is much already published to reinforce our hopes and guide our aims. The secondary modern schools, early discredited, have fought back and reached new levels of attainment. But until this is a mass forward movement we cannot be satisfied with the progress of our schools.

H. E. HOPPER,

Headmaster, Wilby Carr Secondary School, Doncaster.

Critique of a Criticism

Mr. Cook's compendious review of verse anthologies for secondary schools carries the sub-title: A Critical Survey. One of the implications of such a sub-title is surely that we can expect it to *cover* the relevant ground; another is that the critical standards will be reasonably clear, either implicitly or explicitly.

On the first score, the value of Mr. Cook's survey is seriously limited by his failure to disclaim any pretentions to being comprehensive: one's faith in his article is therefore severely shaken by his omission of Denys Thompson and Raymond O'Malley's anthology, *Rhyme* and *Reason*, which is surely among the best of the current anthologies.

On the second point, I would merely observe that his intended (?) relationship between modernity and poetic quality is by no means clear, and I am really puzzled by his remark, *apropos* of James Reeves' *The Rhyming River*, that he doesn't consider it 'a practical proposition for the classroom, since it also has too many poems suitable only for *reading*, (my italics). What else are we supposed to be doing to the poems?

One last point: is 'good taste' so very important as a criterion in choosing poems for school?

GEOFFREY SUMMERFIELD, Lecturer in English, City of Coventry Training College.

Secondary Classrooms

It is a matter of some concern that though most junior schools now have easy access to fiction, poetry and reference books in their classrooms, this right is denied them in many cases in the secondary school.

Too often the secondary school classroom is devoid of books, its walls, apart from an occasional typewritten notice, completely bare and lacking the vigorous and exciting work which is seen in the junior schools.

Why should this change take place so abruptly, as a result of which art is banished to the art room and books to the school library, a library which first year children will be fortunate to use once a week?

The view is still prevalent that it is dangerous to let secondary children use reference books during class lessons, that the set book together with neat but dull notes in an exercise book is sufficient.

Why not a greater use of mobile reference libraries, which would brighten up some of the rather dismal classrooms, and help to encourage a more original approach to learning?

There is a strong case for continuing, at least for a year, the methods used in most junior schools which allow more freedom in the use of books, more opportunity for discussion and for the attractive illustration of their work, and a much less rigid timetable.

> K. W. CORAM, Headmaster, Bandley Hill Junior School, Stevenage, Herts.

Schools Television

MARGARET RAWLINGS

After spending some years in the Inland Revenue, Mrs. Rawlings became a teacher through the Emergency Training Scheme. She taught in a girls' comprehensive school before joining the staff of Hammersmith Day College where she is now in charge of Social Studies. She recently took a degree in psychology at Birkbeck College and is currently engaged in post-graduate research into the effects of television on children and adolescence.

In last Autumn's issue of FORUM, Tony Higgins and Don Waters described techniques for training discrimination in the viewing of television programmes and films, a very valuable exercise in education for leisure.

What, however, of the use of television for Education (with a capital E), and not merely as a source of entertainment, good, bad or indifferent?

B.B.C. Television has recently celebrated its 25th birthday, but T.V. programmes for schools have been in existence for less than five years. During that period the B.B.C. and I.T.V. authorities have put on a multiplicity of programmes, which, by agreement, do not clash on the timetable, thus providing for the schools a reasonably wide choice.

It must, however, be emphasised that only a minority of schools is involved. Somewhere around 3,000 schools, in which secondary schools preponderate, are registered with one or both of the education television services, out of over 30,000 maintained schools in England and Wales, approximately 10 per cent.

Why only 10 per cent?

There is no simple answer to the question why such a large number of schools are outside the educational television orbit. It must be remembered that the B.B.C. service was originally for secondary schools. There could not be a large number of viewing schools until programmes were provided for the far more numerous primary schools. This is now being done and the number of registered schools is likely to rise.

Another factor is, undoubtedly, the conservatism of some head and class teachers, some of whom, no doubt, still look askance at a film projector, let alone a television set. I have heard it said (a) that children already see too much television at home—the school should provide other things; (b) television could be abused by some teachers, who could become lazy simply sit back and let television take over.

On the first point, the excitement of learning something from television, suitably reinforced by the teacher's preparation and follow-up, including criticism of the programme and analysis of how effects are achieved, should be a good antidote to some of the rubbish that passes for entertainment. Regarding the second point, this is to say little more than that there are good and bad teachers. My guess would be that before long persistent murmurings to the effect that 'we don't learn nothing from T.V. with Mr. X' would prod someone to appropriate action. From the evidence of the Himmelweit survey there is no particular educational advantage to be derived from indiscriminate and intermittent viewing. However, when T.V. is geared to educational ends and a skilled teacher directs the viewer's attention to certain details and requires some evidence of that attention afterwards, the results are quite different.

Twenty per week

In the current year, the B.B.C. puts out four schools television broadcasts every day from Monday to Friday, three in the morning and one in the early afternoon, each lasting about twenty minutes; in addition, on one day a week, there is a T.V. regional broadcast, last term in Welsh for schools in Wales only, this term for Scottish schools. Since each programme is repeated once, there are thus ten different broadcasts for varying age ranges, making a total of twenty for the week.

During the Autumn term, 1961, only two of the programmes, 'People of Many Lands' and 'Signpost', were for the primary school; the others were for the secondary school. Of these, three were scientific programmes, 'Discovering Science' (11-12 years), 'Mathematics for Life' (13-14 years), and 'Science and Life' (13-14 years). Two were sociological programmes, 'Century of Change' and 'Spotlight', a topical programme of current affairs, both of these for 13-15 years. There was thus a very proper emphasis on science. These programmes were not viewed in my college last term, but a previous series on 'Science and Life', conducted by Professor Bullough, was used with excellent results in terms of interest and acquisition of knowledge.

The two sociological programmes were followed by several classes. Foreign students, who form a sizeable full-time group in our college, found 'Century of Change' particularly valuable, since it filled in the gaps in their knowledge of recent British history. Those who have language difficulties claim that the visual stimulus of television aids their understanding.

'Spotlight' is an invaluable programme in our branch of education. Topics dealt with recently have included the following: U.N. in the Congo, provision for Sport in this country. Algeria, the Pay Pause, the Common Market. The issues are usually put fairly and cut and dried solutions are not offered. Clearly the teacher's role following such a programme is crucial; every opportunity must be given to the students to express their points of view. What should emerge from a series of such programmes is a recognition of the enormous complexity of the problems facing mankind but also a confidence that ordinary people can attempt to understand them and let their opinions be known through all the channels available in a democratic society.

Timeo Danaos et dona ferentes

A Drama programme for 14-16 years focused on human situations in a variety of plays from the Greeks to Chekhov, aiming to foster an interest in plays as a source of enjoyment and to further the emotional development of the children. This programme had to be abandoned with a group of about average ability: they took one look at the Greeks and could not be persuaded to look the following week. We teachers feel that if the series had begun with a modern play, the Greeks might have been accepted later.

Drama programmes, in fact, are not universally successful-there is a bit too much of the ENG. LIT. approach about them. Shakespearean plays frequently have to overcome hostility from students who, unfortunately, disliked Shakespeare at school. (I have one unique student at present who loves Shakespeare and dislikes modern drama; he is a Chinese from Singapore!) Although such programmes on both channels have, with the teacher's help, often brilliantly overcome this initial antipathy, in my branch of education (which it is only fair to say is not specifically catered for by either channel), teachers feel that the choice of drama is too frequently somewhat precious (last term: Shakespeare, Sophocles, Sheridan, Chekhov, Marlowe) and we would welcome more than an occasional excursion into modern drama, even the avant garde. I believe post office boys would get on better with Osborne and Wesker than with Shakespeare and Sophocles. In fact, a current B.B.C. drama series on the radio presents excerpts from modern literature, both plays and novels, which have far more appeal to day college students and which has been partly respon-

sible for the formation of a play reading group at my college, meeting after hours in the home of a member of staff.

Independent Television for schools, presented in the London region by Associated Re-diffusion (A-R), puts out fifteen broadcasts per week, three each afternoon; five of the fifteen are repeats. Thus, A-R, like the B.B.C., also puts out ten different broadcasts per week. (An announcement has just been made that a few extra repeats will be made from now on, with a special news bulletin for schools at 1 p.m. every Monday.) Since B.B.C. programmes are concentrated in the morning and A-R in the afternoon, after 2.35 p.m., when the last B.B.C. programme has finished, there is no overlapping and schools have a range of twenty different broadcasts plus repeats to choose from, though, in practice they have fewer choices, since suitability for an age group has to be considered.

An analysis of the I.T.V. programmes for last term also show a concentration at the secondary level, with four programmes of which two were French, one History (the Story of Industry) and one drama (*Hamlet*), with an illustrated commentary on the text of the play in the first half term and a production of the play in four parts in the second half. This programme was seen by several girls' classes under the guidance of a teacher with considerable experience of acting and production. It was a very successful series—in the hands of a less skilled teacher it might not have been.

Three programmes were for primary or first year secondary pupils: 'The World Around Us', an experimental series on Mathematics and a third one 'Looking about'.

For the sixth form

Programmes for sixth forms have also been developed by I.T.V. including a language series, 'Ici la France', 'Discovery' (Science for sixth forms) and 'Design', covering many aspects from household equipment to a new monkey house at the Zoo. Currently a programme for 15-18 years called 'Context' deals with the position of the artist and the art forms of many societies, from the Pueblo Indians to our own, from those of ancient Egypt to the Renaissance. To a casual viewer these programmes may seem over-simplified or fragmentary, but they provide wonderful material for discussion with students of good ability, presented in a way that no teacher could hope to achieve, even if his time for preparation and research were trebled.

I.T.V. has pioneered the televising of French programmes. Some teachers thought that the excellent B.B.C.'s sound programmes in French could not be improved on by the addition of vision, but in fact these programmes have been very successful and have splendidly conveyed the flavour of French life, home and cities.

Apart from the fact that the school broadcasting council and other advisory bodies are open to suggestions and requests from the schools, the teacher's role is, in the first place, to select programmes that will appeal to particular classes. In practice this means that some classes will have television lessons and some will not. This is particularly true of day release classes, with different students on each day of the week. Hence, television is no more than an adjunct to the teacher at present; programmes aim at enrichment, not at direct teaching, as in parts of the United States.

The role of the teacher

Adequate preparation by the teacher is essential. He familiarises himself with the programmes by reference to the pamphlets put out by the T.V. authorities well before the commencement of the series. The previous week's programme must be recapitulated and the current week's production anticipated from the pamphlet. Undoubtedly some schools experience timetable difficulties in attempting to meet the needs of particular classes both for sound and television. But this seems inevitable as long as these programmes affect a minority of schools and are not integrated into the school curriculum, simply being available for the teacher to accept or reject according to circumstances.

The teacher has to watch both the programmes and the reactions of the pupils with great care. These can be discussed after the programme and any points of difficulty clarified. The use of television, therefore, demands from the teacher adaptability, flexibility and a willingness and ability to change course if the situation demands it; this includes abandoning a series if it is not making the expected impact, though the reasons for this should be investigated and passed on to the T.V. authorities.

Follow up work can take a variety of forms; discussion, highlighting important points, note-taking of a limited kind during the broadcast, a written quiz, the making of maps and diagrams, essay writing and individual research, visits to museums and theatres, selection of newspaper cuttings on the topic, critical analysis of, for example, how effects are achieved on television or why a programme or personality did or did not appeal.

The superiority of television over films has been questioned and it has been particularly stressed that films are under the control of the teacher who can show them at any time. It is true that T.V. cannot be run through again and that timetables have to be adjusted to viewing time. Television has, however, the advantage of immediacy, particularly in current events. Furthermore, non-technical teachers can manipulate television sets easily; films, not always available, have to be selected, transported and set up and shown by a skilled projectionist. This somewhat lengthy procedure acts as a deterrent to the use of films on the part of some teachers.

But it should not be necessary to pose the question in either/or terms. All schools should be equipped with every aid to teaching, including both film projectors and television sets. Television, in any case, can and does use educational films, which, in one showing, can reach thousands more than the same film travelling round for years.

Teachers who adopt an attitude of cultural snobbery towards T.V. are usually sceptical of it as an educational tool. But television is a dominating influence in almost every home. How can teachers set themselves apart from it and still hope to achieve that pupil-teacher relationship which we hold is basic to education?

The advantages

In the experience of the English, social studies and languages teachers at my college, T.V. is a valuable adjunct in the classroom, providing stimulation to both teacher and student. It gives up-to-date information, culled from many sources, which could never otherwise, except on film, be presented in the classroom. As already remarked, it represents, in total, an immense amount of research which no teacher could possibly undertake, having regard to his other duties.

We believe that the use of T.V. creates better conditions for learning, with less able students in particular, since the teacher's introduction and follow-up, whether oral or written, reinforce the subject matter of the programme. The change in lesson pattern which it provides is also valuable, especially with students with poor powers of concentration.

That T.V. can also be developed for advanced teaching has been demonstrated by the closed circuit educational networks in the United States and by the establishment of a T.V. university in Pekin. But the question of direct teaching by T.V. in this country is a controversial subject, on which teachers and their organisations have strong views, which will no doubt be aired after the publication of the Pilkington report. A recent *Times Educational Supplement* comment: 'Some schools might run on somewhat smaller staffs if there were a large development of schools television, whether general or closed circuit' is a reminder that we must keep our powder dry.

Working Class Students

A. H. HALSEY

Dr. Halsey is Senior Lecturer in Sociology at the University of Birmingham, but has recently been appointed Head of the Department of Social and Administrative Studies at the University of Oxford, a post that he will take up in October.

All the signs are that the Robbins Committee will mark the opening of a new stage in English higher education. The Crowther Report has demonstrated beyond doubt that the urge and potential capacity of secondary school leavers for full time higher education gives us the basis for an unprecedented expansion of universities and colleges. Moreover, the new recruits must be predominantly of working class origin. As Mrs. Floud has pointed out,¹ in discussing the Crowther survey of Army recruits 1956-58, there are substantial reserves of in ability among the manual working groups. From the top decile of ability only 2% were graduates and the son of a manual worker in that group had no more than half the chance of graduating enjoyed by the son of a non-manual father. Robbinsian expansion is likely to make college attendance a common feature of working class experience.

The Background

Behind the new expansionist mood in British educational discussion lies a new awareness of the central place of education in the economic, social and political development of all industrial and industrialising countries. For centuries confined to the preservation and transmission of a slowly changing culture, education now takes on a new significance as the indispensable instrument of economic growth. It is increasingly concerned not so much with the preservation of new knowledge as with the dissemination of new learning to new strata of European society and to new nations in Africa, Asia and Latin America. Thus a historical pattern of accessibility of education emerges which draws in the working classes in larger numbers to higher stages of the educational process at each successive phase of advance towards a society which enjoys affluence based on the industrial application of a scientific culture-a society which will ultimately offer higher education in some form to all its members.

Three successive educational revolutions are involved. The admission of the masses first to primary, then to secondary and finally to higher education. The U.S.A. is already embroiled in the fascinations of the third revolution; some new nations in Africa, where primary school enrolment has risen in ten years from 20% to 80%, are passing feverishly through the first; India, by a more balanced educational expansion, is attempting the simultaneous negotiation of all three. In Britain, where all revolutions are muted and incomplete, the first revolution moved with sluggish unevenness under the pressure of nineteenth century industrialism until the 1870 Act finally brought national literacy. The 1902 Act heralded a long struggle for the second revolution and the Crowther Report supported by the post-war transformation of working class attitudes to length of school life, brings us within sight of a successful conclusion. It is the task of the Robbins Committee to lav down the order of battle for the third revolution.

The American scene

By 1900 about 4% of American 18-21 year olds were in full time higher education. This proportion has doubled in each succeeding twenty year period. The entry of students of working class origin into higher education has accordingly transformed itself from the assimilation of a highly selective minority into the massive accommodation of, for most institutions, an actual majority of "first generation" newcomers to higher learning: and in the process the U.S.A. has become a predominantly 'middle class' nation in its occupational structure, educational customs and style of life.

In Britain we now admit about 6% to full-time higher education in universities, C.A.T.S., teacher training colleges, etc. On present plans² there may be 270,000 places by 1970 offering higher education to 9% of the relevant British age-group.

²cf. John Vaizey: 'Patterns of Higher Education', *Education*, January 6th, 1961, p.14.

¹'Reserves of Ability', FORUM, Spring 1961, Vol. 3, No. 2, pp.66-68.

By 1980, on the optimistic assumption that 500,000 places can be provided, this proportion would rise to 20% (a target passed by America after World War II and already reached by Canada). Meanwhile the output of qualified students from the secondary schools, expanded by increased birth rates, rising educational and occupational aspirations and growing family incomes, will progressively outstrip the expansion of places in our universities and colleges. By 1970 the annual flow of qualified leavers from secondary schools with no college places open to them could rise to 50,000.

Most of these young people will be from working class homes. They will not give up the search easily, especially those from the families of skilled manual workers among whom the second revolution has been most securely established. They will exert heavy pressure on the half-open backdoors of English higher education—the part-time courses in commercial colleges, technical colleges and correspondence courses leading to external London degrees and the innumerable avenues to professional and sub-professional 'white collar' qualifications. Thus entry to a vast underworld of substitute and makeshift higher instruction seems likely to be the fate of thousands of students who will aspire to university and college education on the basis of secondary school qualifications which, in the past, guaranteed a genuine higher education to the tiny minority which acquired them, from good teachers with adequate social and educational facilities.

Social Selection

Against this background the future of higher educational expansion seems likely to repeat the hierarchy of quality which in secondary education runs from the most lavishly equipped public school to the most dilapidated and overcrowded secondary modern school. The outlines of an Oxbridge, Redbrick, C.A.T., training college, etc. hierarchy are already clear and the familiar class distribution of accessibility to the secondary school hierarchy is also likely to emerge.

Certainly the third revolution cannot be expected to eliminate the general process of educational selection against working class children. True, in the expanded American system negroes are more likely to go to college than whites in the English system, and American manual workers and farmers account

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for 40% of American graduates.³ Nevertheless, the *chances* of graduation in U.S.A. run from 43% among the children of professional and semi-professional workers down to 8% among those from the urban manual working classes.

There is, however, a crucial difference in the kind of selection that takes place within higher education. The working class student is hardly, if at all, more prone to failure through inadequate *educability* than is the student of middle class origin. Failure rates or 'drop outs' do tend to increase in an expanded system, (only 60% of American college entrants graduate even when all delays and transfers are taken into account⁴), but, by contrast with those in the secondary schools, these failures have a very low correlation with social class. Even in an expanded system of higher education the working class student remains a selected minority equipped and motivated towards academic achievement to a degree that is comparable with that of his (also selected) middle class fellow. In other words, even after the first and second revolutions, the primary and secondary schools remain as dense social filters to the flow of students towards university and college.

Cultural Adjustment

Higher education for working class children is, however, more than a question of academic achievement. Especially in the case of university students, and most especially at Oxford and Cambridge, it involves accommodation to or assimilation of a new style of life. The process of character formation, the passing on of a distinctive set of cultural values is as important to the traditions of the universities as is the passing of degree examinations.

From this point of view different types of university or college represent different kinds of challenge to the working class student. The pressures to adopt middle class forms of speech, dress and manners are less in the local technical college with its impersonal teaching methods than in the residential training college or the university with a tutorial teaching system. The day student of technology is more likely to be frustrated by inadequate study facilities and the daily conflict with parents and brothers who (however sympathetically) bring the vaguest incomprehension to his difficulties. On the other hand, the two worlds of the working class Oxford undergraduate, though they do not cross so frequently, are even more alien to each other. In either case

³cf. Halsey, Floud & Anderson Education, Economy and Society, Free Press 1961, p.232.

⁴cf. National Science Foundation, The Duration of Formal Education for High Ability Youth, N.S.F. 61-63, Washington 1961, p.26. the 'scholarship boy' must come to terms with the background of family and neighbourhood behind him, the educational-cum-social situation around him and the 'middle class' job, marriage and style of life before him. He is, as Hoggart describes him, inevitably caught 'at the friction point of two cultures' and likely to lose, because of the hurdlejumping process that dominates his life, a capacity to live easily in any social group: he may lose 'some of the resilience and some of the vitality of his cousins who are still knocking about the streets', and at the same time he is ill at ease with the middle class into which his education inducts him.

Results from research

Sociological research has so far yielded little or no evidence on the modes of adjustment of working class students to this aspect of their educational experience. A welcome step forward is made, however, in Brian Jackson and Dennis Marsden's new book Education and the Working Class,⁵ which reports on a group of undergraduates and training college students from the families of manual workers. The sample is drawn from an industrial town in Yorkshire. Jackson and Marsden confirm and amplify the Hoggart picture. The girls returned from training college of predominantly upper working class and lower middle class composition with 'better' accents and some new expectations, with a certificate to primary teaching, but with little social poise and no small resentment of what they saw as a host of restrictive rules and regulations in a narrow college round.

The undergraduates comprise a handful of the quarter of students of working class origin in the English universities - 38 boys and 16 girls. A quarter of the boys went to Oxbridge but none of the girls, though all but one of the latter avoided the local civic university. They gravitated towards scientific and technological studies and five (out of 54) failed. Some lived at home and were never drawn into wide social contacts in the university, whilst at the same time losing contact with their school friends. Others, in residence, tended to join friendship groups of similar social background. They often found it easier to become intimate with a foreign student than with a fellow Yorkshireman from Giggleswick. Whether in or out of residence the bilingual vacillation between 'Yorkshire' and 'B.B.C.' was for many an unresolved dilemma. There is some evidence among the Oxbridge men of a falling away in university academic achievement from the high promise of brilliant scholarship results which seemed

(continued on page 105)

⁵Kegan Paul 1962.

An Experiment in Non-Streaming in a New Town Junior School

KENNETH CORAM

Mr. Coram is headmaster of Bandley Hill junior school, Stevenage.

Our two-form entry junior school was opened in April 1958 with fourteen pupils on roll, and grew rapidly to 320 children by April 1959. It has been unstreamed since the beginning. Since then, it has been organised on a six-month-chronological-age class basis, forming two classes in each year group with an age range of approximately six months in each of the eight classes (see George Freeland's article on Non-Streaming in New Trends in English Education).

Socially non-streaming is a complete success, and combined with a school life which has no prefects and no children with special privileges, each child feels the value of his own contribution to the school's activities. Despite the alarmist reports of the activities of children in New Towns, here behaviour problems have been reduced to a minimum.

Other advantages

The less-able child gains immeasurably from this atmosphere in the classroom; he has no loss of confidence. His work tends to be more lively and imaginative and of a higher standard, stimulated by the more able children in the group. The more able child gains socially, in that he learns to work in friendly co-operation with the less able. His advice is sought, yet he is not held apart as one of a privileged group, 'the scholarship class', which exists alas even today. The more able and the few gifted children are not held back, as the flexible timetable enables them to attempt more advanced work and to develop their special interests. The average child also gains from a non-streamed atmosphere for he is carried along by the joint impetus and enthusiasm of the group. He is less conscious of his own average ability, and more likely to emerge with that spark of latent originality, which all of us probably possess, intact and ready for further development.

This type of educational organisation has a con-

siderable bearing on the society in which the child will eventually assume adult responsibilities. As personal relationships appear to be the weakest aspect of our industrial system we would be ill-advised to miss any opportunities by which they might be improved.

Standardised tests and a variety of intelligence tests are used to enable the staff to obtain an objective picture of their year groups, and not solely for reports or for selection purposes. With no weekly or termly tests, and no class marks, all of which have proved to be quite unnecessary, much effort has been put into evolving new approaches to the teaching of mathematics, and in producing a great amount of attractive topic work in English, social studies and in mathematics too.

Regular interviews with the parents enable the teachers to keep them informed of their child's progress and of any difficulties, either social or educational, which may arise. Many parents were disturbed at first with this change of procedure, saying that their child had had a much better report at his previous school (outside the New Town, perhaps London, perhaps Scotland or the West country). This was frequently due to the misleading nature of teachers' subjective reports, based on class tests or tests set by the headteacher. The parents have been encouraged to place more value on objective tests based on a wider selection of children's ability.

Flexibility

Mr. E. Harvey in his excellent article, 'Unstreaming a Junior School' (FORUM, Spring 1960) remarked on the inherent flexibility of the unstreamed school. Here, this flexibility enables year groups to mix freely on centres of interest, and it allows the staff opportunity for class timetables. which will be free enough for them to fit in television and radio programmes when they wish and to complete topics whilst the interest of the children is at its most intense. All the staff prefer teaching in unstreamed classes, although one or two feel that there is a case for smaller classes in this type of school organisation. Since any argument for smaller classes in junior schools needs support, perhaps the unstreaming of schools might make teachers realise the necessity of small classes for effective education.

One of the most pleasant results of the atmosphere in our unstreamed school is that there are no 'academically slum areas' in our midst. Each group is as lively and intelligent in approach as any other and such a feeling throughout the school must be of immense value in helping to form the liberal view of education.

WORKING CLASS STUDENTS

(continued from page 103)

to be related to feelings of lost meaning and purpose along the hard, long, restricted road to a specialist honours degree. Something of the loss of resilience and the timid self-doubting uprootedness of Hoggart's picture of the scholarship boy is reflected in the interviews. These young graduates tended to marry and mix with others of similar social and educational pedigree to an extent which suggests that their social mobility is encapsulated within a stratum of new men and women with similar backgrounds.

Nevertheless, as the authors point out, 78 per cent of those who passed 'A' level in this Yorkshire town qualified for their future career by taking a degree or teaching certificate. They are the new middle class. As their numbers grow the crippling social and psychological distances of our traditional class structure will be reduced. Only those with die-hard romanticism for the immeasurably more constricted warmth and solidarity of traditional urban working class life would regret the advance of educational opportunity. THE NEXT ISSUE OF FORUM (September 1962) WILL BE A SPECIAL NUMBER ON

THE COMPREHENSIVE SCHOOL

Including articles by:					
R. S. FISHER	Kenneth Macrae				
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and others					

The number will include authoritative surveys of the present position in the movement towards comprehensive education in England, Wales and Scotland, as well as articles dealing with the actual problems involved in developing comprehensive schools.

Extra copies may be ordered from: The Business Manager, Forum, 81 Lutterworth Road, Leicester. Price 2/6d.

SOME IMPRESSIONS OF JEAN PIAGET AND HIS WORK

(continued from page 88)

sorts of things they may reasonably be expected to discover at various stages of development.

(4) Given the sort of analysis of task difficulty mentioned under (2), we can begin to think systematically about how these can be overcome. This means not only using the kind of situation which will capitalise on the child's own interest and curiosity, as in (3), but determining on the best order of tackling these difficulties, when to approach them piecemeal, when to insert them in the total setting, and so on. Of course, every teacher will partly be doing this for himself, whether he is introducing elementary reading, algebra, or differential calculus. But a consideration of the general stages of development will suggest how the ground may sometimes be prepared by introducing relevant material at earlier stages in concrete form, but foreshadowing both the language and the ideas for the analysis of which the pupil is not yet ready.

(5) Finally, Piaget has shown repeatedly how it is often possible simply to teach children the right answers without awakening their interest or evoking any real understanding. The effects of such 'teaching' on their spontaneity and self-confidence are too obvious to need elaborating. But he has also shown that when the readiness to understand is present, the teaching that is necessary may be very much reduced, since children will then, if they are given the right kind of introduction and material, go out of their way to teach themselves. Above all they will now take a good deal for granted, which earlier would have wanted 'hammering in'.

Book Reviews

Books on Backwardness

A Survey by DR. M. F. CLEUGH (Senior Lecturer, Institute of Education, University of London)

Teachers of backward children in ordinary primary and secondary schools could well start by reading Dr. J. D. Kershaw's *Handicapped Children*. This book by a school medical officer, is a good starting point, because (1) it gives a picture of the child behind the handicap, and shows the effect of his handicap on him as a person; (2) it discusses the child's adjustment to employment and society and, therefore, gives a framework within which the work of the school fits; (3) while many of the graver handicaps with which the book deals are to be found in special schools, lesser degrees of poor sight, hearing, physical inco-ordination, etc., are common in backward classes in ordinary schools, as every teacher knows.

By far the best and most comprehensive treatment of backwardness is to be found in Burt's The Backward Child, published a quarter of a century ago. It still remains a classic, and the touch-stone of quality against which all later work in this field must be judged. Sir Cyril Burt has more recently written a short book, The Causes and Treatment of Backwardness, which is perhaps simpler to start with. Tansley and Gulliford's book, The Education of the Slow Learning Child, while mainly concerned with special school children, has some useful things to say on causation and testing which will interest teachers in ordinary schools. My book The Slow Learner attempts to discuss patterns of organisation for slower children, and the second half of the book is specifically concerned with making arrangements for special educational treatment within ordinary schools.

Turning now from the rather more general matters of causation and organisation to the actual teaching of the children, many teachers will first think of Schonell's Backwardness in the Basic Subjects, and perhaps his Diagnostic and Attainment Tests. His simpler book, The Psychology and Teaching of Reading, however, is in some ways more useful to teachers, certainly to begin with, and there is also Diagnosis and Remedial Teaching in Arithmetic. Teachers of primary children may like to start with either M. E. Highfield's The Young School Failure, or with Elizabeth Taylor's Experiments with a Backward Class. This latter says very little, but it is pleasantly written, and its strong point is that the attitude towards the children is sympathetic and helpful. It seems to me that the Cheshire Education Committee's *The Education of Dull Children at the Primary Stage*, which otherwise would be more useful than Taylor, because there is more in it, suffers from having occasionally a rather impatient and negative tone. A book which I have liked for many years, though it is not easy to obtain, is the Leicester Education Committee's pamphlet *The Education of the Retarded and Difficult Children in the Leicester Schools.*

Many of the books about the education of slow children tend to be too exclusively centred on the teaching of the three 'R's'. Granted that this is an important part, yet it is by no means the whole of the curriculum, and it is important to consider the slow child's education as a whole, as the Cheshire Education Committee did and as I have done in the new publication which I have edited, Teaching the Slow Learner (reviewed in the last issue of FORUM). These three volumes share with other books already mentioned the advantage of having been written by practising teachers, and additionally I like to think that one of the merits of these works is that they are based on a positive and sympathetic attitude towards the children, while at the same time being realistic about their defects. As there are separate volumes for primary and secondary schools, this affords a useful transition to books for secondary teachers, to which I now turn.

It is surprising how little has really been written about helping backward children in secondary schools-in fact, I think the only complete coverage is in the book I have edited. David Holbrook in Education for Maturity has some valuable remarks to make on the teaching of English, and Kneebone's I Work in a Secondary Modern School, though not specifically on backwardness, is the work of a headmaster who is sympathetic to the less able, and his book makes some wise comments incidentally. Much the same can be said of Fielden Hughes' Down the Corridor in which he showed that an old-fashioned senior school had much to recommend it over the enormous factories of the present day as far as the headmaster really knowing his children is concerned. A. W. Rowe's The Education of the Average Child is valuable, and gives suggestions for schemes which might well be used with adaptations for slower children. In the N.U.T.'s publication Inside the Comprehensive School some useful comments on non-academic courses are to be found in the Mellow Lane chapter, and on remedial education in the West Bromwich chapter. Kathleen Ollerenshaw's recent book, The Education of Girls, may also be consulted with profit.

Problems of behaviour and discipline are often greater among the more backward children as Richard Farley's book Secondary Modern Discipline shows. His book is down to earth and useful especially for the young teacher fresh from college. In my book Psychology in the Service of the School, I discussed the commoner sorts of difficult behaviour and showed how the teacher can help to work more with the Child Guidance Clinic in preventing maladjustment. A thought provoking book, though one which may not be so easily obtainable, is J. Gabriel's The Emotional Problems of the Teachers in the Classroom with its salutary reminder that we teachers are only human ourselves, and our own reactions may need watching and controlling. Dr. Wall's Education

ASSOCIATIONS FOR THE ADVANCEMENT OF STATE EDUCATION

(continued from page 92)

form a Joint Committee for the Advancement of State Education, and a sub-committee was set up to receive the views of associations concerning the functions and structure of a possible federation of associations. A national federation may seem premature seeing that some associations have only recently been formed. But curing the next few months many more should be formed, both as a result of widespread interest aroused by a *Guardian* article on the Cambridge Association, and as a result of the interest stimulated amongst their own members by A.C.E. Of the many Press reports, that in the *Guardian* produced the liveliest and largest response.

Whither? The P.E.P. report on Parents' Views on Education last year and the recent report 'Education and the Working Class' published by the Institute of Community Studies have made most obvious the need for the apparent contradictions of our complex educational system to be clearly and sympathetically explained to many parents. The Cambridge Association has already produced many useful explanatory pamphlets, but a real challenge, and one that must be met, is the need to provide a really effective link with bewildered parents (whose school life was often brief) who can be made aware of all alternatives and possibilities when deciding, for instance, whether a pupil should try to transfer to a technical college or continue his school life in a secondary modern school.

One finding of the P.E.P. survey was that more of the families at the bottom of the social scale

and Mental Health is also useful here. A recently published book by James Hemming, Problems of Adolescent Girls, is valuable in that it gives the young person's point of view, and suggests issues of which the schools should be aware.

In this connection it may be useful to remember that fiction and autobiography can give a valuable insight into the other person's point of view, and can help us to respond with sympathy and greater understanding. For instance, Ruth Adam's story *Fetch her Away* gives an authentic account of the feelings of a deprived and delinquent girl, and of the efforts of social workers to help her. Lucy Sinclair's *The Bridgeburn Days* gives the autobiography of an ex-institution child, and shows how the feeling of

thought that more should be spent on housing, national assistance and the health service before education. Members of these families will often be reticent to approach heads of schools or local authority departments. How often have members of school staffs complained that they never meet the parents they would most like to see at meetings of Parent Teacher Associations. These meetings are infrequent and of necessity will only help a few; the resources of the school and the stamina of the staff would be tested if even half of the parents arrived. I believe that these associations for the advancement of State education should make it impossible for any parent to feel that he cannot easily receive advice from them or be directed to the body best able to answer a specific problem. Imagination and persistence are needed to forge this link. Many of us who have time available to consider educational problems could share the benefit of our own educational good fortune by extending the work of the Citizens' Advice Bureau and by providing a room where once a week, or monthly at first, parents could present their problems.

Meanwhile, each association could develop an increasing core of informed opinion so that when there is an apparent need for more university places, or when the availability of adequate education for deaf children is the paramount problem, reasoned discussion can both enlighten the members and result in the passing of resolutions to be made public and delivered to the Ministry department concerned. Round robins from an informed public may one day be frequent enough to sway the Treasury's hand. Perhaps each association should have as its motto the title of Edmund Holmes' last testament: 'What is and what might be'. Faith and purpose (finance, too) could one day end the dichotomy in educational theory and practice. being different coloured her life. Although she herself was far from backward, teachers of backward children do not need to be told how often the children from local authority homes are to be found in the slower classes, and can gain much from reading her account with empathy, for even though material conditions have improved, the essential features of deprivation remain. Other autobiographies, as for example of parents of backward children such as Pearl Buck's *The Child who Never Grew*, are also useful.

So far, I have said nothing about research, preferring to concentrate upon books which have direct bearing on classroom conditions, but there is, of course, a considerable volume of research topics. I will be heavily selective in this, and omit those which like M. D. Vernon's Backwardness in Reading are too cluttered to be useful. Many teachers will know of the work of Daniels and Diack in reading, but if I had to pick out a single work of research in reading to recommend, it would be a Swedish study by Malmquist which has been translated into English under the title of 'Factors related to reading disabilities in the first grade of the Elementary School'. A short account of this research has been given in 'Educational Research'. E. M. Churchill's Counting and Measuring discusses the growth of arithmetical concepts in young children, and after some heavy weather near the beginning, has a lot to offer the teacher. Finally, J. E. Collins' Effects of Remedial Education challenges some generally accepted conclusions.

Of official publications by the Ministry of Education, the teacher of backward children will be particularly interested in numbers 5, 'Special Educational treatment' (now out of print); 18, 'Reading ability'; 30, 'Education of the Handicapped Pupil, 1945-55', and 32, 'Standards of Reading, 1948-56'.

I have so far not mentioned American books which are a field in themselves. Limiting myself sharply, I would choose Featherstone's *Teaching the Slow Learner*, Smith and Burks' *Teaching the Slow Learning Child*, Harrison's *Reading Readiness*, D'Evelyn's *Individual parent-teacher conferences*, and Gronlund's *Sociometry in the Classroom*.

In this brief conspectus, I know there are many omissions, but I thought it more useful to make a comment about a few books rather than have a long list without comment.

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Health and Wholeness

Mental Health and Education, by Dame Olive Wheeler, William Phillips and Joseph P. Spillane. University of London Press (1961), 208 pp., 15s.

It is good to find an educational psychologist, a physician and a psychiatrist co-operating in a work whose aim is preventive, applying the latest research society for health—which is wholeness.

Dr. Phillips, in criticising constructively the development of the school medical service, stresses the high incidence of psychosomatic illness much of which, originating in childhood, could be prevented by school medical officers trained, as are University doctors, to care more for the mental health of their charges. He shows what can be done through group therapy.

Dr. Spillane gives a thorough and up-to-date survey of the origin, recognition, incidence and treatment of maladjustment in children, illustrating by well-chosen case-histories.

The bulk of the book is contributed by Dame Olive Wheeler, who sees the present degree of mental illhealth as a challenge to educators. In outlining a theory of 'education for health' she covers the entire agerange from the home through the primary and secondary stages to further and adult education. When studying ability and aptitudes, she includes a valuable section on emotional needs, and summarises the integrative and disintegrative influences operating today for and against her main aim of wholeness of being. Throughout, she collates all recent research in educational psychology and applies it to every aspect of the school system: organisation, curriculum (stressing the need for creative arts), learning methods, class groupings, teacher personalities and attitudes, etc. That our present educational system is unbalanced and largely disintegrative is shown by the social symptom of so much adolescent delinquency: "There is surely as much cause today for public concern over the arrested development in youth as there was formerly over infant mortality." Society itself is sick, for adults have so little grasp of fundamental values that the education we transmit lacks true love and wisdom: "Material advances in recent years have been so rapid that 'the body, now larger, calls for a bigger soul'."

The intelligent layman may well ask, "What are those responsible for education doing *positively* for our children to meet the challenge of our time and to prevent the rot setting in?" This comprehensive yet condensed and readable short survey will tell him what is proposed even if, unfortunately, it is not yet universally practised.

MARY SWAINSON.

An Amateur at Large

Schools of Europe, by Anthony Kerr. Bowes and Bowes (1961), 292 pp., 25s.

Mr. Kerr's book is at one and the same time a refresh-

ing and irritating contribution to present literature on comparative education. The author disarms criticism by stating emphatically in his introduction that he is an amateur and has no real qualifications, other than a number of years as a schoolmaster, to undertake the task. In his introduction, indeed, he is at great pains to stress the difference he feels between 'the educationalist' and the schoolmaster. The book is refreshing because it is the work of a practising teacher who has been willing to devote most of his vacations to visiting a large variety of countries in Europe, not only to study the educational system there but also to talk with officials, schoolmasters and parents. Mr. Kerr, therefore, has energy and enthusiasm in plenty. What he lacks, as an amateur, is the ability to detach himself from the present scene and see everything in its proper relationship not only to present and future developments but also to past experience.

It is in his conclusions that the amateur nature of the undertaking becomes apparent: e.g. like many other people, the author assumes that so many of the middle schools on the continent of Europe are the equivalent both in aims and objectives and in curriculum of the English secondary modern school. This is far from true. He seems not to have noticed the increasing attention that is being given to the middle school in Germany and he has, I feel, underrated the aims both of technical instruction and of the work of the Realschule in that country. These are just a few of the obvious examples; there are several others not so obvious. Finally, the overall picture that emerges of Mr. Kerr's study of a country-for example, Belgium-is far from being more than an approximation. In other words, the picture is out of focus. I quote Belgium because I know Belgium best, but I had a feeling as I read this book that everything for most countries is out of focus.

This is, however, not a stick with which to beat Mr. Kerr. His industry, his enthusiasm, his desire to know have led him to write a book which is of great interest, and in some 300 pages he has gathered together a mine of up-to-date information which makes it a useful source book.

If one ignores his general conclusions or treats them with caution, as also his rather sketchy chapter on boarding and experimental schools, one can find much of value.

I personally intend using the book with my own students to discipline them in their study of comparative education and to get them to see (a) how difficult it is to be a student of comparative education and (b) where Mr. Kerr has gone wrong and why.

VERNON MALLINSON.

Comprehensive Values

Values in the Comprehensive School, by T. W. G. Miller. University of Birmingham Institute of Education Educational Monographs, No. 5. Oliver and Boyd (1961), 118 pp., 12s.

Not a few of the inquiries into children's attitudes which tell us very little in the end are worth writing up for the interest of the methodological ingenuity employed in working them out. Professor E. A. Peel recommends this one in his foreword as the work of an impartial onlooker from Australia who has been considering "the particular question as to what values comprehensive education was promoting in its pupils with respect to school, subjects, vocations, leisure activities and morale". This definition of the range of Dr. Miller's inquiries is fairly given; but the results, when we come to take a closer look at these seemingly broad topics, are somewhat arbitrarily confined by the kinds of 'value' found suitable for comparison among boys in their second (!) year, or in some cases in their third year, in three non-selective and an undisclosed number of selective schools. The tests applied to these boys and the problems Dr. Miller had to grapple with in what proves to be a novel and intriguing scheme of attitude assessment are fully described. Yet the dates covered by the inquiry are for some reason withheld. One feels too, in view of the prominence of social evaluations, that more clues might have been offered to enable us to discover something about the environmental conditions and about the ways in which the nonselective schools, each in a separate geographical area, handled the work of their first and second years.

Surprisingly too the three preliminary sections, which describe how the concepts of men and women called 'comprehensivists' came to be developed and what their 'philosophy' and assumptions really are, drop no hints as to what distinguishes the practices of non-selective secondary teaching from more traditional methods in the 13-14 age range. The variety of recent experiment and achievement in this field has after all been outstandingly interesting, as may be seen in the L.C.C. inspectors' study of London Comprehensive Schools (1961).

Dr. Miller is not indeed concerned with what goes on in the schools and examination rooms; but he does apparently try to get the variants in the forms of organisation fairly represented; and he applies his tests by matching young boys in grammar and modern schools against their counterparts in comprehensive schools. These last are chosen from similar intellectual groups provided by the records within the same L.E.A.'s selection procedure. In brief, the opinions of boys in non-selective schools who would otherwise have gone to grammar or modern schools are compared with those of their peers to whom this has in fact happened. The boys in the notional 'grammar' and 'modern' lists of the non-selective schools are also available for comparison with one another. Statistical tables or mean ratings are relied upon to show significant differences in scoring.

What does Dr. Miller find? The jackpot question about the non-selective school was put with succinctness more than thirty years ago by the late Sir Godfrey Thomson when he asked "whether the social advantage outweighs the intellectual danger" (and incidentally gave his answer in the affirmative). Dr. Miller deals only with the social advantage. His results show that thirteen-year-old boys in the high ability groups in nonselective schools were less enthusiastic about the importance of Latin than their peers in the grammar schools; that they were less impressed with the social standing of a bank clerk and more impressed with the standing of manual occupations; that they held their school in less esteem (though, even so, in higher esteem than their fellow pupils in the lower ability group); and that, when faced with a question involving the choice of completing homework rather than accompanying a friend to the cinema, were stronger in their belief in the necessity of homework. These are a few of the averaged judgments of the boys of upper ability. The lower-ability boys in comprehensive schools also produced judgments which, when compared with those in similar groups in secondary modern schools, seemed also to have social or moral significance, indicating that already the kind of schooling they had experienced had impressed itself upon their outlook.

Dr. Miller's summing up is on the whole cautious: he might have got something more definite from the older boys. Some may think it is all too impressionistic, but he has after all lived with his material. Not all will agree with his interpretation of the meaning of declared leisure-time interests. He feels that the decidedly better physical equipment of his comprehensive schools must be specially mentioned as influencing attitudes and value judgments; and of course if this is a factor of importance, it may be a tiresome disturbance in a set of comparisons in which many variables are present. Taking one particular set of observations into account, Dr. Miller thinks that membership of a non-selective school lacks any "advantageous effect in respect of racial and religious discrimination". The intellectual stimulus, if I interpret him correctly, is at least as powerful as could be expected in a selective school; and in the case of the "secondary modern type of child" (a question is begged with the use of this term, as indeed it is throughout the study), the encouragement is greater, leading, e.g., to later leaving.

Conclusions of this order, even if not always invulnerable to the probings of logical analysis, certainly arouse interest; and there can be little doubt that Dr. Miller has started something. Later comers will profit from his good hunches as well as from his errors of judgment. This is the fate in store for all men of enterprise, and Dr. Miller is certainly to be praised for the vigour and assurance with which he has attempted to simplify some of the issues in a long debate.

All users of the book will be grateful for the scholarly list of 168 bibliographical items, although I am sorry to have to say in this review that not a single article in FORUM was found to be worth mentioning. Most users will be maddened by the system of foot-note references, which in some instances directly cite the authority but in most cases involve the use of a pointless numerical code to identify the source.

A. V. JUDGES.

[NOTE: We felt that a fuller notice of this research than could be given in FORUM, Vol. 4, No. 1, was desirable.—EDITORS.]

Working Class Pupils

Education and the Working Class, by Brian Jackson and Dennis Marsden. Routledge & Kegan Paul (1962), 268 pp., 25s. (A Report of the Institute of Community Studies).

It is a paradoxical difficulty of social research that, although strong emotional involvement in a problem can generate the energy to surmount all sorts of obstacles, it can, at the same time, prevent the investigator from taking a sufficiently objective and detached view of his work. This difficulty is well illustrated by this interesting study of the impact of grammar school education on working-class life.

As working-class recipients of grammar school and university education, the authors are understandably involved in their chosen subject. They based their investigations on their home-town in the north of England. 'To have gone elsewhere would have strengthened our claims to "distance" and "objectivity". And these are qualities which we value deeply and have tried to attain in this report. But against this there seemed to be so much to be gained by facing the paramount fact that we are dealing with people and not things... No social observer can simply observe. His essential humanity compels him to feel, to "belong".' (pp. 3-4).

This involvement in their problem results in a book that is never dull. The human problems of workingclass parents and children in coping with the grammar school, with its challenges to family and neighbourhood traditions, are discussed with rare sympathy and insight.

Such involvement has its negative side, too. According to interview evidence based on 88 working-class children who completed the full grammar school course, most of the children readily assimilated the middle-class ideology of the grammar schools. This the authors do not like. 'There is something infinitely pathetic in these former working-class children who lost their roots young, and who now with their rigid middle-class accent preserve "the stability of all our institutions, temporal and spiritual"... ' (p. 219).

The authors are involved in an unanalysed contradiction between their strong identification with their image of the working class and their equally strong desire to see educational institutions opened more fully to working-class children. This contradiction arises because grammar school educated working-class children become middle-class citizens and tend to lose their old identifications. Resolution of the contradiction lies in an educational system 'which accepts and develops the best qualities of working-class living' (p. 224).

What are these qualities? They are never discussed explicitly, although it is clear they have a lot to do with working-class family and neighbourhood life. But what exactly? The answer can be prised from between the lines and takes the form of an unquestioned assumption that working-class family and neighbourhood life embodies warmth, solidarity and sociable living. There is undoubted truth in this, but the intensive and pervasive social relations which make solidarity and mutual support possible also make tension and conflict possible. Perhaps this is why the authors dismiss one of the most objective studies of working-class life (Dennis, N.; Henriques, F.; Slaughter, C., *Coal is Our Life*) as 'fundamentally hostile reportage' (footnote, p. 223), for, among other things, this study of the Yorkshire mineworker brings out some of the tensions and conflicts in working-class life. Furthermore, the idea that studies of the working class are to be judged by whether they are apparently 'hostile' or 'favourable' is a considerable departure from the avowed regard for 'objectivity'.

Underlying the whole book is a sentimental attachment to an idealised abstraction of 'working-class culture'; an abstraction which rests on a highly selective perception of that culture, and which shapes the investigators' observations and interpretations. Despite this, the book is a stimulating contribution to the literature and succeeds in communicating the 'feel' of the changing social relations entailed by social mobility via education. P. DUNCAN.

An Academic Exercise?

The Economics of Education, by John Vaizey. Faber & Faber (1962), 165 pp., 21s.

Mr. Vaizey believes there is something to be said for attempting to work out how much a society *does* spend on education (we are all at one on this), how much it *could* spend (certainly a matter on which we need the advice of economists), and how much it *should* spend. This is where, for educationists, the controversy really begins—and this is also where, hardly surprisingly, Mr. Vaizey concludes (as early as page 36) that "the finance of the education system is largely a socio-political question". The remaining chapters are something of an academic exercise, underlining the obvious.

This is a pity, because there is room for considerable discussion on many aspects of the economics of education—on, for example, the school meals controversy (the opposition of teachers to participation in the school meals service has more than one economic aspect); the problem of waste in the provision of ancillary services like milk and transport; the inefficiency of the two-tier system of government at local level—to take only a few pressing problems at random.

Readers who expect the book to deal with problems of this kind will naturally be disappointed. But one suspects that work in this field is in its infancy and that, with the growing importance of education within the national economy, the Vaizey bridge between economist and educator will, in the fullness of time, become a busy highway. Educationists, while welcoming such developments, should surely strive to ensure that no temples are built at either end of the bridgeor, worse, in the middle of it. F. H. PEDLEY.



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