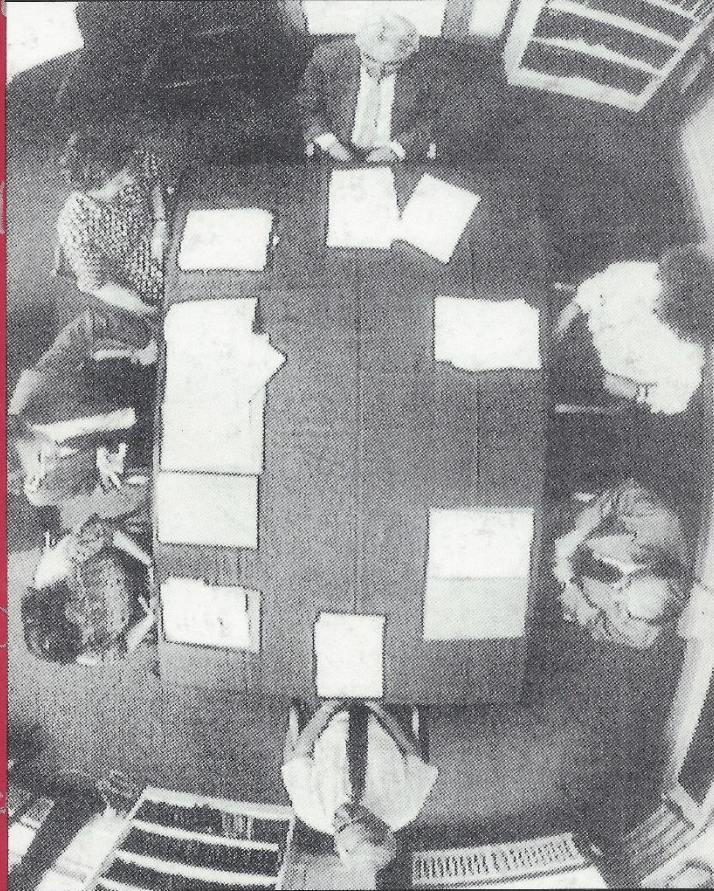


CHANNEL FOUR TELEVISION

# EVERY CHILD



# IN BRITAIN

REPORT OF THE CHANNEL FOUR COMMISSION ON EDUCATION

Form Master/Assistant

Latin  
Mathematics  
Art  
Algebra  
Geometry  
Science  
Domestic Science  
Art



# Preface

All is not well with British education. There are many symptoms. Parents and employers continually complain of poor standards in English and arithmetic. In educational achievement generally our young people do not reach levels common in the rest of Europe. There are frequently expressed concerns about whether schools are doing enough to encourage good behaviour.

Young people themselves do not seem to see much use in the education system. Britain has the highest drop-out after compulsory schooling among industrial nations. Even before the official first opportunity of leaving, many persistently truant. Neither apparently do the teachers want to be there. In recent years teacher recruitment and retention has been discussed in terms of continuing crisis.

Sir Claus Moser said in his presidential address to the British Association in 1990, 'Britain is in danger of becoming one of the worst educated of all the advanced industrial nations with hundreds of thousands of children having education experiences not worthy of a civilised nation'.

What is wrong and what might be done about it? In order to get to the heart of the matter, Channel 4 established a Commission of five leading authorities to investigate the state of our education, and to recommend what might be done immediately to make improvements.

We are grateful to the Gatsby Charitable Foundation for generous support in making possible the publication and distribution of the Report.

A handwritten signature in black ink, which appears to read 'Richard Attenborough'. The signature is fluid and cursive, with a large initial 'R' and a long, sweeping tail.

(Sir) Richard Attenborough  
Chairman, Channel 4 Television



Denis Donau/Network

# Introduction

We were invited three months ago to set down what, in our joint opinion, were the most important reforms that should be made in our education system, concentrating on those that could be introduced in the short-run (say, 18 months) and without absorbing undue additional resources. Though individually we may have very different long-term ideas on the organisation of society and the concomitant organisation of education, we found, in the course of our discussions, that we were agreed on the many important reforms that we have listed in Section Three of this Report.

We have prefaced our recommendations by two very short sections outlining, first, the salient features of the recent history of our education system and, secondly, some comparisons with our European neighbours.

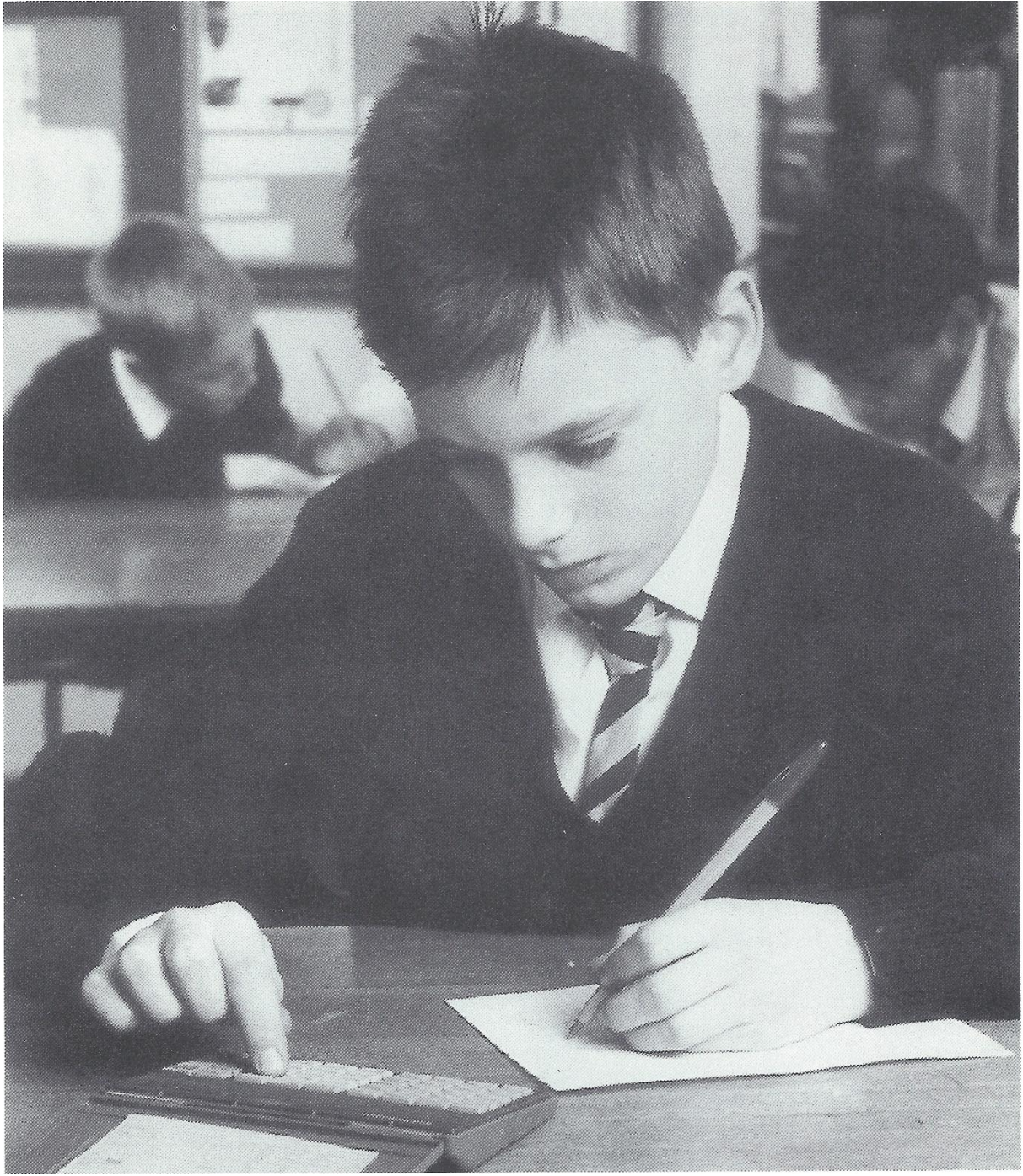
We began work in June 1991 and held meetings throughout the summer. We visited many locations in the UK as well as Germany and Holland in the course of our work.

We have drawn on the research findings of individual members and a wide range of other important comparative data. In particular, we have used a numerical description of English education compiled for the Council for Industry and Higher Education by the Education and Employment team at the University of Manchester, National Institute of Economic and Social Research Report No 1, *Pre-vocational Schooling in Europe Today* London: NIESR, and *Science Achievement in Twenty-three Countries*, Oxford, Pergamon.

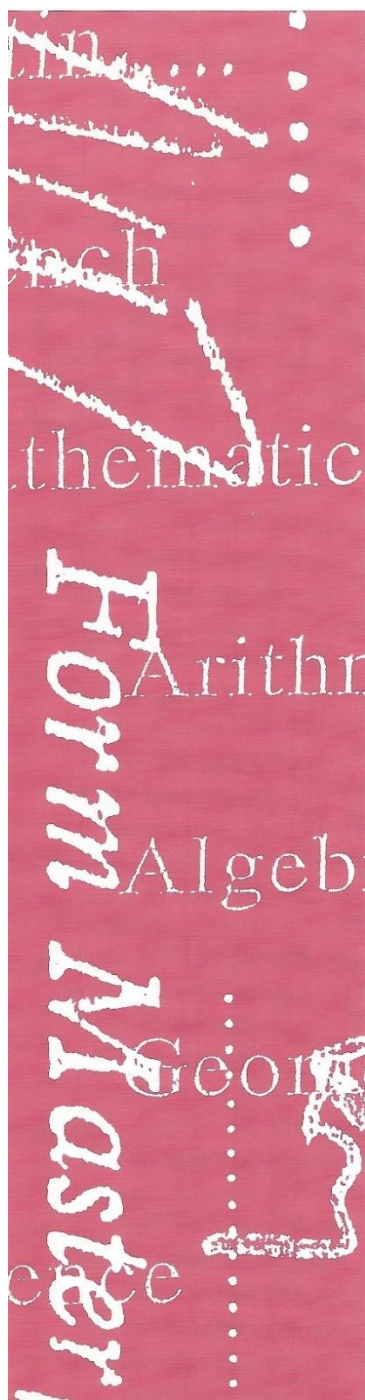
The views that are expressed in the Report are those of the individual members of the Commission and should not be regarded as reflecting those of the institutions to which they are attached.

The initial draft of this Report was drawn up by Professor Alan Smithers and Dr Pamela Robinson, of the University of Manchester. The other members of the Commission wish to express their gratitude to them for undertaking the arduous role of putting our thoughts into a coherent whole.

A H HALSEY  
NEVILLE POSTLETHWAITE  
S J PRAIS  
ALAN SMITHERS  
HILARY STEEDMAN



Murphy F. Chisholm/Robert Harding Picture Library



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# 1

# What is wrong

## INTRODUCTION

1.1

Education is concerned with forming the next generation; it includes many aspects of society besides schooling. We concentrate, in this Report, on the role of schools and colleges. This is a vital component, but not the whole of the general process of reproducing and improving a civilisation. However, it is a component over which we do have some control.

1.2

The key problem in English state\* education, as we see it, is that the present arrangements in our junior and secondary schools prevent youngsters reaching the levels of educational attainment now common in the rest of Europe. This failure is not caused by poor teachers – indeed teachers are often as much victims of the system as the children they struggle to teach. It is the system itself. Although for its best pupils, English education is very good (for example, university degree courses), it has failed to develop for the average youngster a system of education comparable in quality to that now existing in virtually every other European country.

1.3

There are differences between the English and Scottish education systems. The Scottish system performs somewhat better than that in England, with a higher percentage of 16 year-olds staying on in full-time education and training. Nevertheless, the Commission believes Scotland too has failed to develop education for average youngsters of the quality now widely available in the rest of Europe. It therefore believes much of its analysis – and most of its recommendations – apply with equal force to Scotland.

1.4

In making the arrangements in junior and secondary schools in this Report our sole concern, we are aware that our answers must depend on the success of the country in ensuring that children are well placed to enter school and have good prospects of entering a satisfactory economy and society when they leave. Thus a strong family, adequate support from parents, high quality pre-schooling which develops children's social skills, and, no less important, a high employment economy, are essential to motivate children and make the efforts of teachers meaningful and effective.

\* We have not dealt explicitly with private education which accounts for about seven per cent of all pupils, even though we are fully aware of its social importance in Britain compared with other countries.

1.5

We are also aware that attainment of basic subject skills in school is not the only educational issue of importance. But, such concerns as teacher quality, moral education, and truancy, while posing important questions, do not constitute the root problem. Indeed, they are not the cause of the crisis in English education, but may be symptoms of it. Neither do we concern ourselves with resources, though we do regard educational investment as a high national priority. For the moment the overwhelming national need is to find ways of ensuring that our young people attain levels of achievement similar to those now common in the rest of Europe.

1.6

The Commission's objective is to set out the immediate steps the next Government should take, regardless of its political complexion, to start putting things right.

## THE ENGLISH EDUCATION SYSTEM

1.7

The English education system has for long given great weight to the development of high academic abilities, and, at its best, has served well the academically most able. As presently constituted, it provides an efficient track to higher education for those who do well in GCSE and A level.

1.8

In Figure 1.1, we show the education system as a series of steps. The first two represent the theoretical position to the end of compulsory schooling (though, in practice, truancy is a major problem). At age 16 comes a parting of the ways. About 28 per cent remain at secondary school, 16 per cent move on to further education full-time and just over 22 per cent part-time.

1.9

The proportion continuing beyond compulsory schooling is low by international standards; of the dozen advanced countries with which the Department of Education and Science (*DES, Statistical Bulletin, 1/90*) has recently drawn comparisons, the UK came out the lowest.

1.10

This seems to be because the system operates essentially as a sieve for academic ability. Passage to each stage beyond compulsory schooling is controlled by competitive examinations designed to eliminate the academically less able. (Tables 1.1 and 1.2). Even those scoring A or B in GCSE may fail at A level which is therefore a high-risk investment of time even for those successful at GCSE.

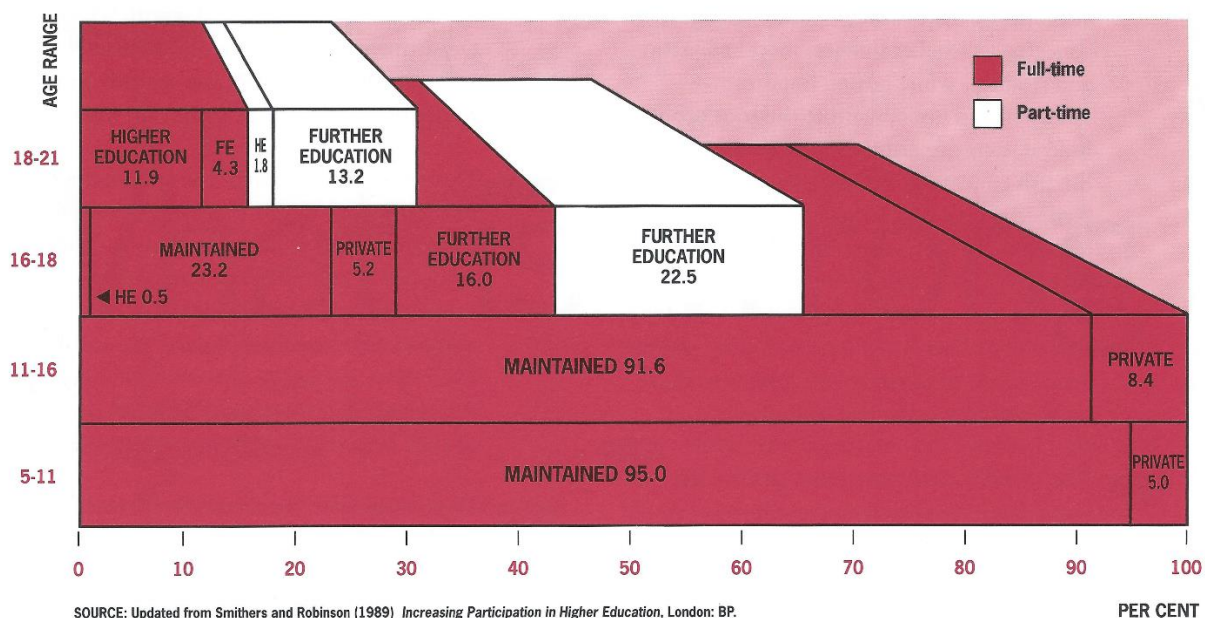
1.11

Destinations at 16 are closely related to GCSE results. Table 1.3 shows that 80 per cent of those with five or more GCSEs at grades A-C go on to take academic qualifications, usually at A levels, either at school or in FE. Those with 1-4 at A-C or five or more at D-G tend either to return to school to try to get better grades, or move on to FE to take vocational qualifications. An additional 20 per cent go on to Youth Training (this overlaps to some extent with part-time FE). But there is ambivalence about this, since only about two in five placements lead to qualifications of any kind. Few such qualifications have general currency on the labour market and are widely considered to be second best by parents. The proportions embarking on Youth Training or entering employment increase as we go down the GCSE scale.

1.12

The English educational system therefore uses GCSE and A levels to select a small proportion of the age group (currently about 16 per cent) for education to a high standard on degree courses.

**FIGURE 1.1: PARTICIPATION IN EDUCATION AT DIFFERENT STAGES 1989**



**TABLE 1.1: SELECTED GCSE RESULTS 1990**

SUBJECT	Number of entries <sup>1</sup>	% A,B	% C	% D-G	% Ungraded
English	659.4	25.6	26.8	47.1	0.5
Maths	606.6	16.5	23.7	57.4	2.4
Science <sup>2</sup>	262.7	17.0	23.5	54.8	4.7
Modern Languages <sup>3</sup>	383.4	36.3	15.9	46.0	1.8
CDT	156.2	21.9	17.5	57.5	3.1
History	219.9	29.1	20.2	47.5	3.2
Geography	273.6	26.8	19.8	50.4	3.0

1. Thousands of candidates taking examinations
2. Does not include separate sciences
3. All modern languages

Source: Joint Council for the GCSE, 1990.

1.13

Many of the others (84 per cent) are left with an acute sense of failure.

## HISTORICAL PERSPECTIVE

PRE-1944

1.14

There is nothing new about the problems now confronting British education. They reflect concerns that have haunted Britain for well over a hundred years. From 1870, when Britain began moving towards education for all between the ages of five and eleven, there have been continual complaints that too few British young people were reaching higher levels of secondary school education. Before 1944, it was assumed that this was because there simply were not enough free secondary school places for all the bright children from poorer backgrounds who might benefit from them. It was then felt wrong that able children from poorer homes should be denied an education given almost automatically to children from more affluent backgrounds.

1944 EDUCATION ACT -  
THE TRIPARTITE SYSTEM

1.15

The 1944 Education Act set out to deal with this problem by guaranteeing a free secondary school education for all. In doing so, however, it professed a concern that the education provided should be appropriate. A competitive examination, taken at the age of 11, would allocate the academically ablest children to grammar schools. Those with a distinct practical bent or those wishing to pursue entry to industry or commerce would go to technical and commercial schools. The least able – or those intending to leave school at the new minimum leaving age of 15, introduced in 1947 – would go to secondary modern schools which would ‘offer a general education for

life’, relieved of what was regarded as the tyranny of examinations.

1.16

There was a huge unsatisfied demand – especially among middle class parents – for grammar school places. The 11+, the competitive examination introduced to allocate grammar school places, has been criticised for being unreliable in measuring



Hulton Picture Library

• At a technical school

ability at 11, and for being unable to identify late developers. (Yates, A and Pidgeon, D, 1957, *Admission to Grammar Schools: Third Interim Report on the Allocation of Primary School Leavers to Courses of Secondary Education*, London: NFER.)

1.17

The Act did not however, increase adequately the variety of school provision for those who failed to gain entry to grammar schools. The tripartite system set up by the Act was not completed - few technical schools were provided. Able youngsters selected for

**TABLE 1.2: SELECTED A LEVEL RESULTS 1990**

SUBJECT	Number of entries <sup>1</sup>	% A,B	% C	% D,E	% Fail
English	71.2	27.6	21.0	36.6	14.8
Maths	77.3	31.3	14.1	27.8	26.8
Physics	42.6	28.8	15.6	31.2	24.4
Chemistry	47.3	33.4	15.1	28.7	22.8
Biology	44.4	26.6	15.3	32.8	25.3
French	26.0	33.0	18.8	32.8	15.4
History	43.8	26.5	19.2	35.0	19.3
Geography	39.8	24.4	17.8	36.0	21.8

1. Thousands of candidates taking examinations

Source: School Examinations and Assessment Council, 1990.

**TABLE 1.3: DESTINATIONS OF 16 YEAR-OLDS BY GCSE RESULT 1989**

DESTINATION	% 5 or more A-C	% 1-4 A-C	% 5 or more D-G	% 1-4 D-G	% Ungraded	% All
School	69.2	28.7	14.3	8.7	6.1	35.0
Further Education						
A Level	11.3	4.1	0.5	0.2	0.0	5.0
GCSE	0.3	2.8	1.8	1.2	0.5	1.4
Vocational Qualifications	7.5	17.9	12.8	6.0	1.9	10.8
Youth Training Scheme (YTS)	2.0	12.7	23.7	26.1	17.8	13.3
Employment	5.3	20.5	27.7	30.4	27.1	18.6
Unknown	4.4	13.3	19.2	27.4	46.6	15.8
	(N <sup>1</sup> =203.1)	(N=175.8)	(N=112.5)	(N=81.7)	(N=46.6)	(N=619.8)

1. Thousands

Source: School Examinations Survey 1988-89, DES Statistical Bulletin 1/91, London: DES.

grammar schools – including those from working class backgrounds – had a good chance of gaining recognised qualifications and doing well. But youngsters who were just as able – from any background – who went to the secondary modern schools had very little chance of doing well. They were not only held back by the inflexibility of the system, but for many years even discouraged from taking public examinations.

1.18 Far from introducing dramatic improvement in British education, the 1944 Act came to be seen as having done little more than rationalise the pre-existing distribution of educational resources.

1.19 The position was made worse by the fact that the potential of the third arm of the tripartite system, the technical and commercial schools, was not realised. Where they were provided they proved popular with many parents, but even at their peak, they catered for at most seven per cent of British youngsters. The decline of technical schools is one of the tragedies of British education. It seems highly probable that there is a link between Britain's post war economic performance and the withering away of such schools and their replacement by the more narrowly academic and less vocational grammar schools.

## COMPREHENSIVE REORGANISATION

1.20 Comprehensive schools – encouraged actively by the Labour government after 1964 – were introduced to provide a greater opportunity for all youngsters to realise their potential. It was hoped they would offer the best of the

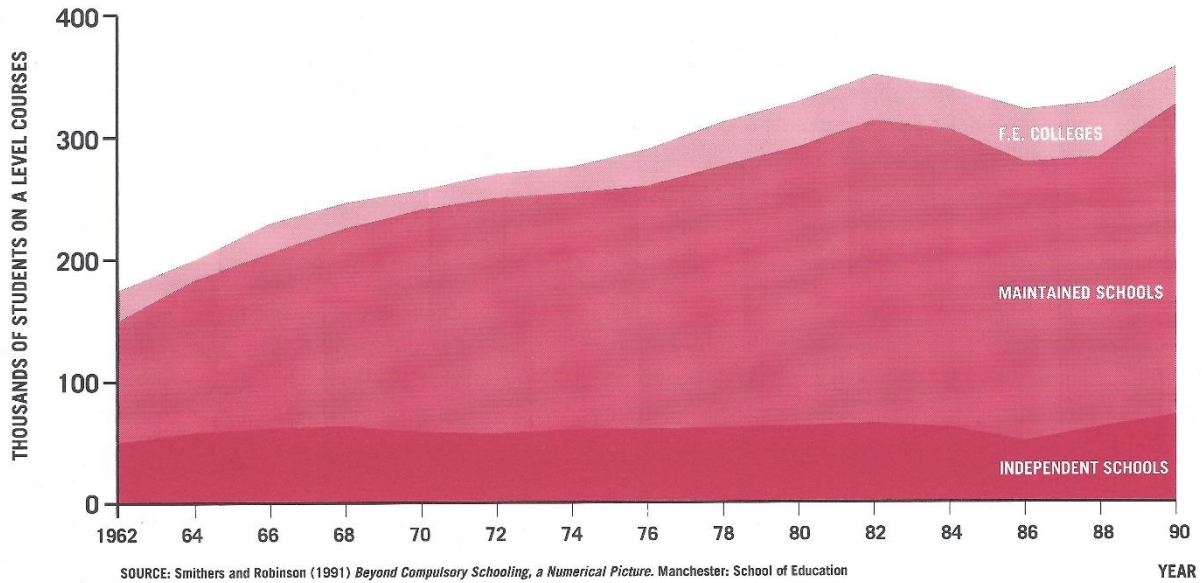
grammar and technical traditions along with the popular ethos of the good secondary modern schools. Although it was realised that family background would continue to play a major role in determining educational outcomes, it was hoped that such factors could be minimised within the common culture of a single school.

1.21 There has been some success. Figure 1.2 shows that there has been a great expansion in the number of A level students, for instance. This increase has been largely the result of the growing numbers of comprehensive school pupils staying on in full-time education.

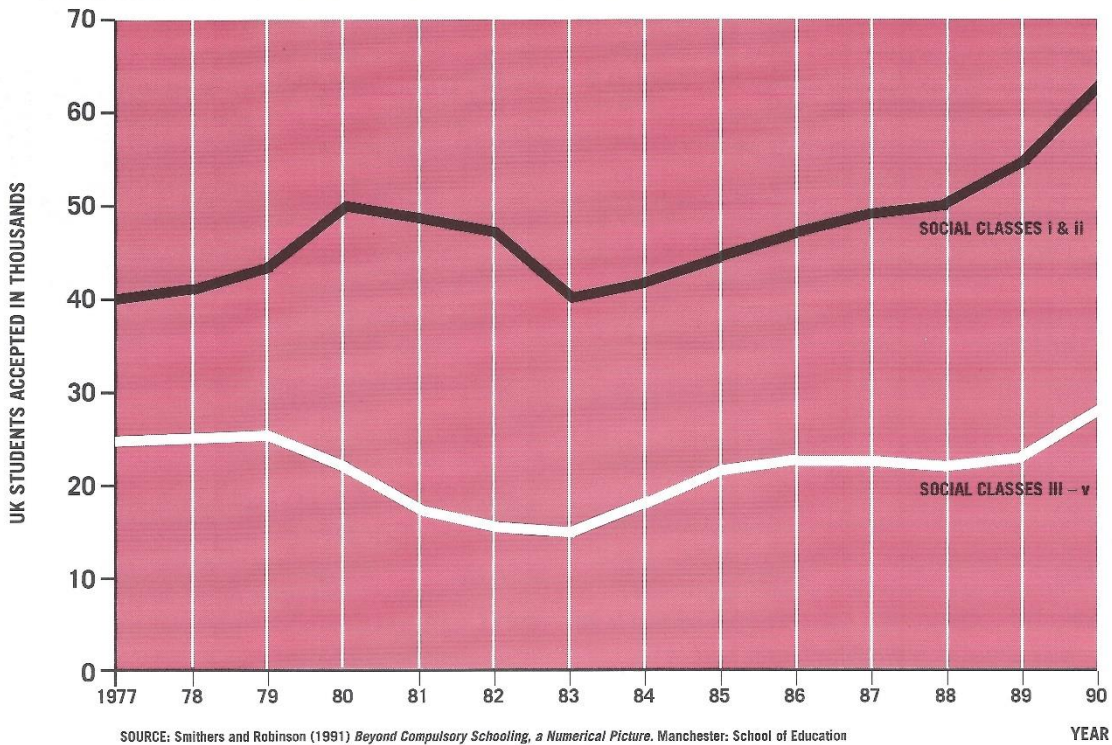
1.22 But all too often these schools have offered a 'watered down' grammar school curriculum, even though it has been clearly inappropriate for many pupils who have been therefore condemned to failure. Nor have they altered the basic social inequalities in education. While helping more children to gain educational qualifications, the removal of the 'escape route' to grammar schools for those working class youngsters lucky enough to gain entry may have actually increased inequality. In recent years an increasing proportion of entrants to higher education have come from social classes I and II (Figure 1.3), with young people from those classes being four times more likely to apply, and even more likely to get in.

1.23 The numbers of young people who today feel they have been given a poor deal by their schools and feel discarded is compelling testimony that some of the most important objectives of the comprehensive reforms have not been achieved.

**FIGURE 1-2: GROWTH IN A LEVELS BY SECTOR**



**FIGURE 1-3: UNIVERSITY ACCEPTANCES BY SOCIAL CLASS**





●The future Professor Smithers with his school friends from Roding Junior School, Dagenham, Essex, 1948. Of this group he was the only one who passed the 11+.

●Commission member Alan Smithers with members of his junior school football team, reunited after forty years. He discovered his friends felt they had gained little from their secondary modern schools.



Nicky Johnston



Nicky Johnston

●Alan Smithers later talking to children of his former team mates. Most felt they had been let down by their schools, although in this case the schools were comprehensives.

## ACADEMIC DRIFT

1.24

We have seen that England has an education system firmly based on its academic origins, and geared to university entrance. Any attempts to make changes will have to reckon with the strength of that tradition. Many efforts at providing more practical/technical education have foundered because of a drift toward academic subjects. The prestige of academic study, for example, led to institutions created for technical or technological advancement becoming or aspiring to become universities, first the Colleges of Advanced Technology and then the Polytechnics. Further Education colleges are keen to demonstrate their worth by teaching A levels.

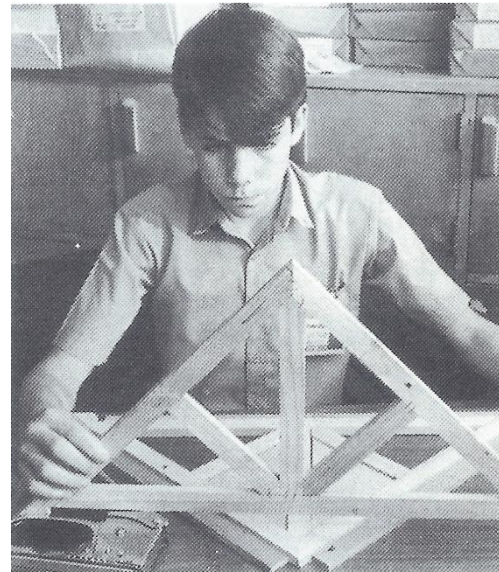
1.25

Most recently we have been seeing an academic drift or 'inappropriate intellectualisation' in relation to the teaching of 'technology' in our secondary schools. Technology as defined in the National Curriculum is, as a matter of principle, deliberately general and 'context-free'. Even in relation to its most applied part (Attainment Target 3: Planning and Making, and the associated Programme of Study: Working with Materials) no specific materials are prescribed, nor is a degree of accuracy specified in the making of objects (comparable to the 0.5 mm typically prescribed in woodworking classes in Germany).

1.26

The reason often given for the changes in emphasis in Britain is that they make the subject more attractive to academically-inclined pupils. It can thus be taught, so it is suggested, 'across the whole ability-range' and made obligatory for all pupils. As it has emerged, it is less about actually *making*

things, than about talking and writing about making them. British teachers of the established, more practical technology courses have expressed to us their serious concern that many pupils of middle and below-average academic attainment will suffer from these changes. Such pupils may excel in executing practical work but become dispirited in verbalising 'design briefs'.



Martin Mayer/Network

• Learning to build a roof strut.

1.27

The rise of technology as a school subject in the National Curriculum has been at the expense of practical subjects, taught and examined in a practical way. At a few British secondary schools, courses that are more specific and more practically-oriented are still available (they were available at very many of them until overtaken by 'modern ideas'). They lead to GCSE examinations in subjects such as Technical Drawing, Engineering Workshop Theory and Practice, Motor Vehicle Studies, or Metalwork. (The examples are from the engineering side;

corresponding examinations were set in other vocational areas, such as office or domestic work.) An estimated one quarter of all secondary school pupils passed examinations in such subjects in 1981 above CSE grade 4. These practical and specialised GCSF courses have gradually been replaced in the past decade by more general GCSE courses which go under the heading of 'Craft, Design and Technology', and are close to the new National Curriculum requirements due to come into effect for 14-16 year-olds in 1993.

## SWING AGAINST SCIENCE

Although recent years have seen a marked increase in the numbers of young people continuing beyond school to higher education, this has not been true of all subjects. In particular, as Figure 1.4 shows, the swing against the sciences, identified 20 years ago in the Dainton Report, has continued. (Dainton Report, 1968, *Enquiry into the Flow of Candidates in Science and Technology into Higher Education. Cmnd. 3514*. London: HMSO.) The proportion of those taking A levels in 'science and maths only' has declined by more than half- from 44 per cent in 1963 to 21 per cent in 1990. This represents a decrease in actual numbers from 86,175 in 1985 to 68,358 in 1990. A major reason for the decline has been the pronounced shift towards combining the sciences with other subjects. The proportion studying some science in the sixth form has increased. This in itself is welcome. What is of concern, however, is that only about a fifth of those taking mixed combinations of A levels aim for the sciences and engineering in higher education, the rest tending towards business studies and the social sciences.

1.29

This is reflected in applications to universities which fell by nearly 20 per cent in engineering and eight per cent in the physical sciences in the period 1985-88 (the most convenient recent period over which like can be compared with like). While the number of entries is rising rapidly, those in physics, engineering and technology, have remained on a plateau, despite attempts to increase numbers.



• Business before science.

## QUALIFICATIONS

1.30

The English system brings through relatively few young people to graduate level in engineering and technology compared to other countries. (Table 1.4). While in Japan there are five applicants for every place, in the UK there are barely enough people coming forward to fill the places available and it has not proved possible to increase supply by raising the number of places.

**TABLE 1.4: GRADUATE OUTPUT BY COUNTRY**

SUBJECT AREA	Per 1000 of age cohort				
	UK (1985)	France (1981)	West Germany (1984)	Japan (1985)	USA (1985)
<b>Engineering &amp; Technology</b>	18	20	28	45	25
<b>Science, Maths &amp; Computing</b>	26	33	10	8	27
<b>Medical &amp; Health Related</b>	7	5	13	12	15
<b>Social Sciences, Law, Business Studies</b>	37	58	45	91	87
<b>Arts, Humanities, Education</b>	36	77	37	55	43
<b>Other<sup>1</sup></b>	14	9	6	18	33
<b>Total</b>	<b>138</b>	<b>202</b>	<b>139</b>	<b>229</b>	<b>230</b>

1. Mass communication and documentation, home economics, service trades, transport and communication, agriculture, forestry, fishing, other and not specified.

Source: Updated from Smithers and Robinson (1989) *Increasing Participation in Higher Education*. London: BP.

**TABLE 1.5: NUMBERS QUALIFYING<sup>1</sup> IN ENGINEERING AND TECHNOLOGY IN SELECTED COUNTRIES**

	UK	France	West Germany	Japan	USA
<b>Doctorates</b>	0.7	0.3	1.0	0.3	0.5
<b>Master's degrees</b>	2	-	-	5	4
<b>Bachelor's degrees</b>	14	15	21	30	19
<b>Technicians</b>	29	35	44	27	17
<b>Craftsmen</b>	35	92	120	44	na

1. In thousands with raw numbers for Japan and USA reduced in proportion to UK population.

Source: Prais (1988) National Institute Economic Review, February, 76-83.

1.31

The National Institute for Economic and Social Research (NIESR) has argued, on the basis of international comparisons, that it is at the support levels of technicians and craftsmen that we fall even more seriously behind other countries (Table 1.5). Our schooling system does not set out to develop vocational-technical talents. This leads to fewer students in the UK than elsewhere (other than USA) studying for, and obtaining, intermediate vocational qualifications like the Business and Technician Education Council (BTEC) National Certificate or City and Guild Certificates. About two-thirds of the British workforce appear to lack vocational qualification compared to only about a quarter of the German (Table 1.6). This has obvious consequences for quality of workmanship, productivity, earning power and for full employment in a competitive and technologically progressive world.

## CONCLUSION

1.32

The three tranches of reform – the 1944 Education Act, the Comprehensive Reforms of the 1970s, the Education Reform Act of



Granada Television

- Commission members with parents and children from East London setting out for Holland to see for themselves the sort of arrangements the Commission believes should be adopted.

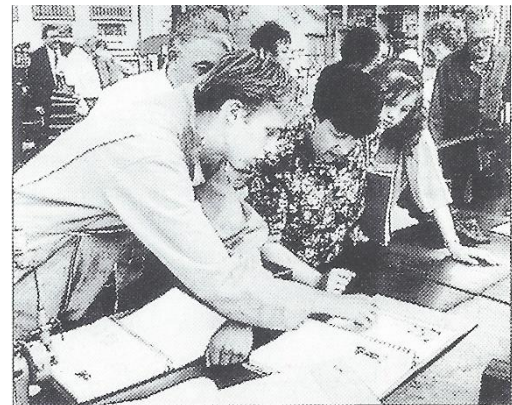
1988 – have failed to provide Britain with an effective education system suitable for the technological world of today. The paradox of change without change is brought about because education is still heavily focused on the needs of an academic minority. The education system worked well for this group in 1900 and it still does so today. The needs of the majority in relation to their subsequent working life have been given far too little attention.

1.33

Many with practical abilities vital to the economy become disillusioned with education and training long before they leave secondary school. They come to see education as not for them and truant or misbehave.

1.34

Curing the problem will be much harder than diagnosing it. There have been so many changes in recent years that more will not be welcome. But changes must come. Our national future depends upon it. These changes must be based on empirical evidence not on ideology. There is much we must learn from abroad.



Granada Television

- ...And some of what they saw.

**TABLE 1.6: VOCATIONAL QUALIFICATIONS OF WORKFORCE**

VOCATIONAL QUALIFICATIONS	% France (1988)	% Germany (1989)	% Netherlands (1985)	% UK (1988)
<b>Degrees and higher diplomas<sup>1</sup></b>	14	18	18	17
<b>Intermediate vocational qualifications<sup>2</sup></b>	33	56	44	20
<b>None<sup>3</sup></b>	53	26	38	63

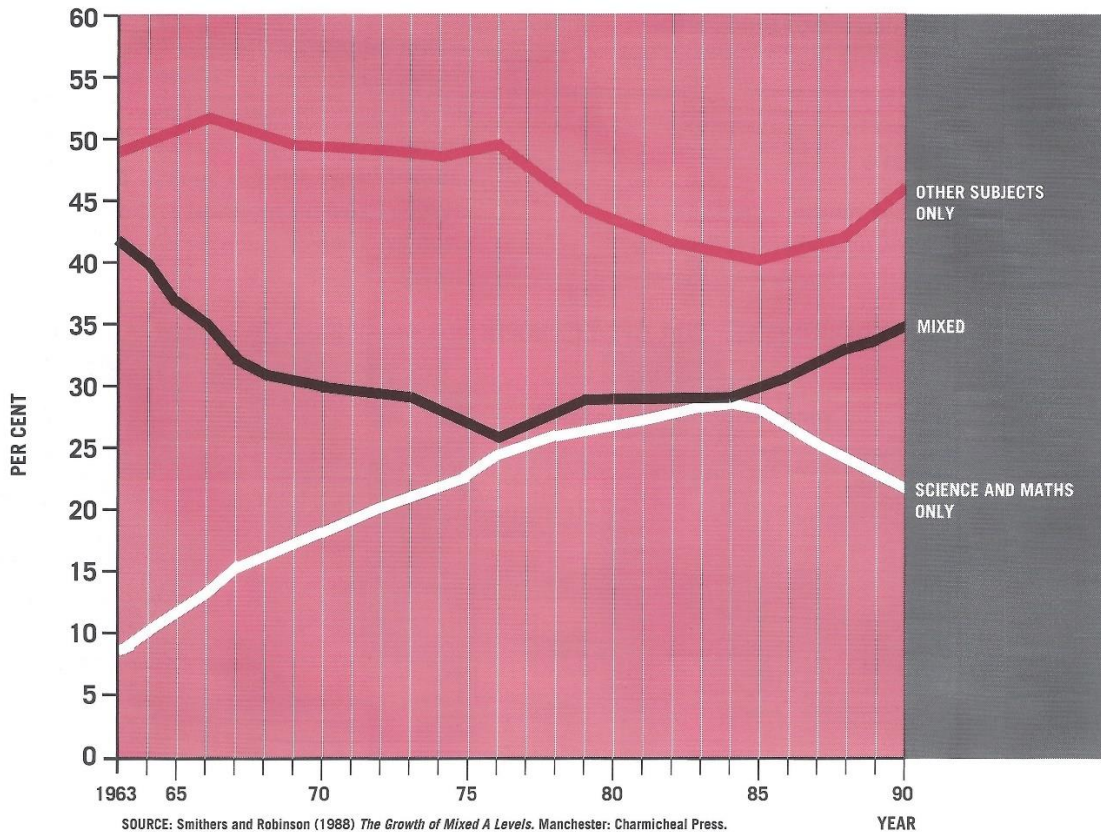
1. Degrees, Higher National Diplomas (HND), Higher National Certificates (HNC), teaching, nursing and equivalent

2. BTEC National, City and Guilds and equivalent

3. General education only (below Higher Education)

Source: Mason, Prais and van Ark (1990) National Institute Discussion Paper No. 191.

**FIGURE 1.4: TRENDS IN A LEVEL STUDIES**



# 2

# Experience from abroad

2.1

## EDUCATIONAL ACHIEVEMENT

Comparisons of what young people can do in various countries by the International Association for the Evaluation of Educational Achievement (IEA) demonstrate the strengths and weaknesses of the English education system. Figure 2.1 shows that in science (which is sufficiently similar throughout the world for comparisons to be made across countries) England has one of the highest levels of achievement among 18 year-olds. Indeed, it shares the top three places with Hong Kong and Singapore – both of which inherited the English system. (Postlethwaite, TN and Wiley, DE, 1991, *Science Achievement in Twenty-three Countries*. Oxford: Pergamon.)

2.2

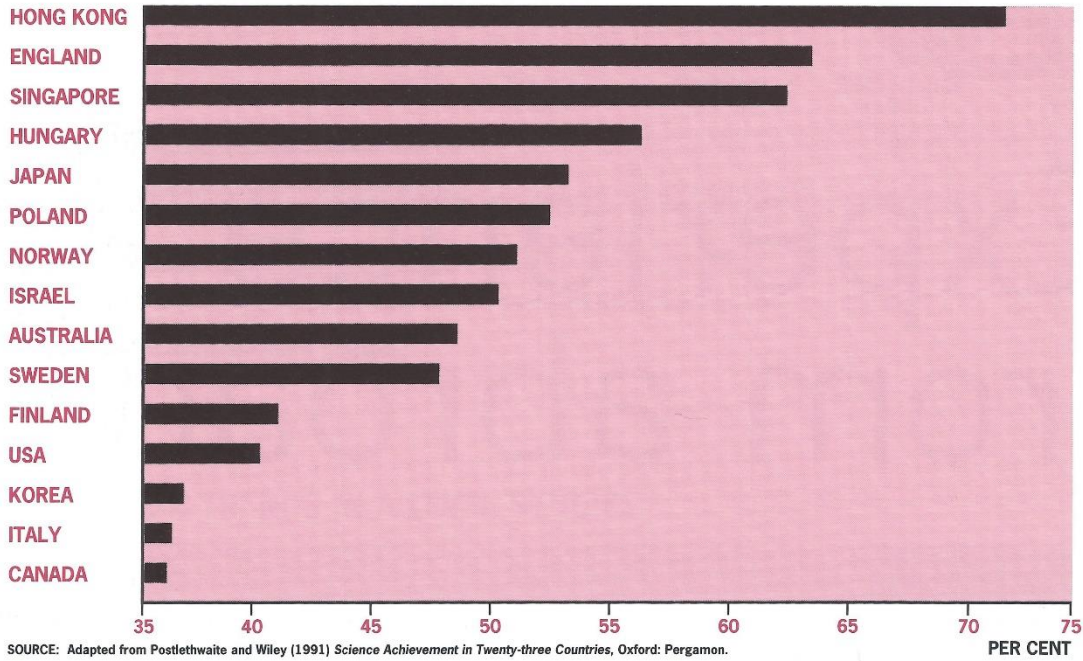
The high level of performance reflects in large part the early specialisation in the English approach to schooling. Whereas in some countries (for example France,

Germany, Hungary, Poland, Sweden, Korea), nine or more subjects are studied in upper secondary schooling, in England three A levels are the norm. In England only about five per cent of the age group takes sciences at this level, while in other countries (for example Canada, Finland, Korea), the figure can be 20 per cent or more. However, even when only the top four per cent of the age group is considered, England still comes out very well – in the top three with Japan and Hong Kong.

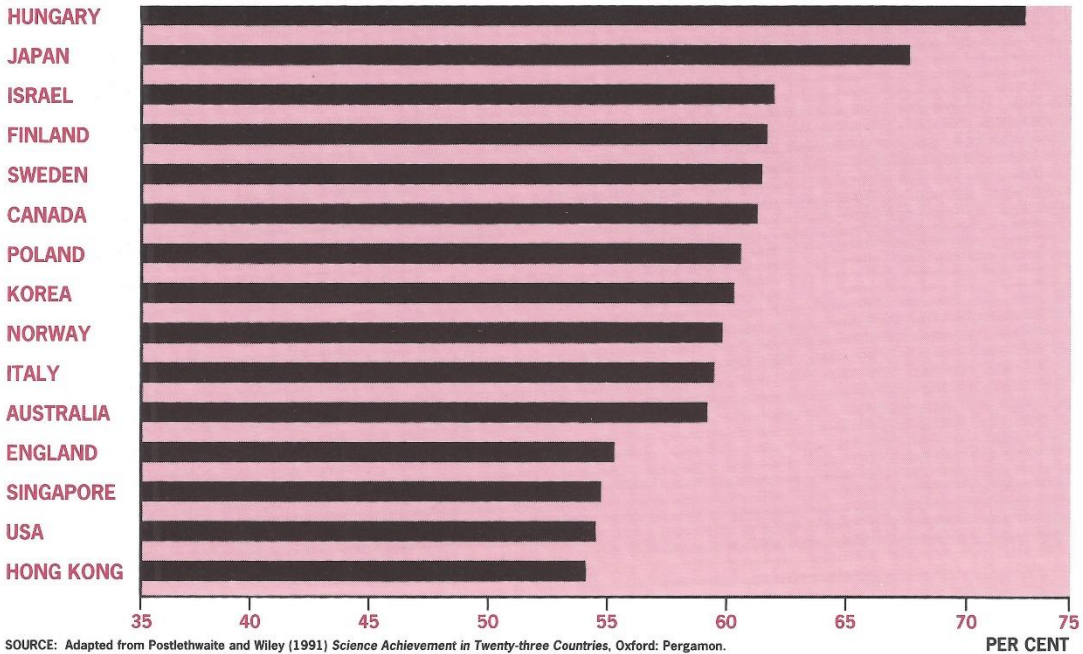
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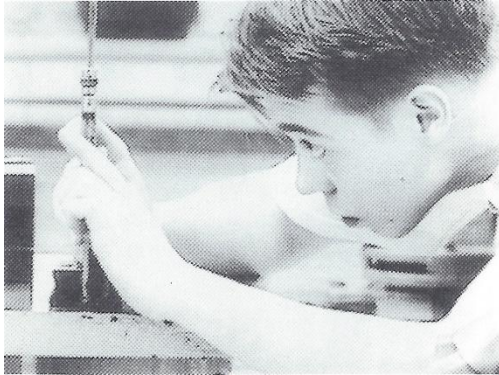
It could be argued, therefore, that the English system is an efficient way of picking out and educating the most academically able to a high level. This is borne out by the nature of our university education. Degree courses in England tend to be shorter than in other countries and a first degree is usually attainable at age 21-22. In France or Germany first degrees usually take six or seven years and are usually not attained until 25-27. Less

**FIGURE 2-1: SCIENCE ACHIEVEMENT AT AGE 18 BY COUNTRY**



**FIGURE 2-2: SCIENCE ACHIEVEMENT AT AGE 14 BY COUNTRY**





Granada Television



Granada Television

- A German apprentice in the Hamburg machine tool company, Koeber, learning basic workshop skills and precision.

than a sixth of those who enter a British university on the basis of our rigorous A level qualifications fail to complete their course and gain a degree; in many parts of Europe, on the other hand, about half drop out in the early years of their university course. While fewer students are admitted to higher education in Britain, graduate output is about the same as in France and Germany. Moreover, Britain's graduates are acknowledged throughout the world to be of very high standard. All this refers to the top 10-20 per cent of pupils.

2.4

The other side of the picture is represented in Figure 2.2 which shows the results of IEA's comparisons of 14 year-olds. At this age almost everyone still attends school, and these figures measure how the average pupil in each country performs. Here England comes close to the bottom. The same is true for ten year-olds (the correlation is 0.84), with England scoring well below Australia,

Finland, Hungary, Japan, Korea – Korea has class sizes of 50 or more. It is astonishing that most primary schools in England came below the very lowest scoring school in Japan (See Postlethwaite, TN and Wiley, DE *op.cit.*)

2.5

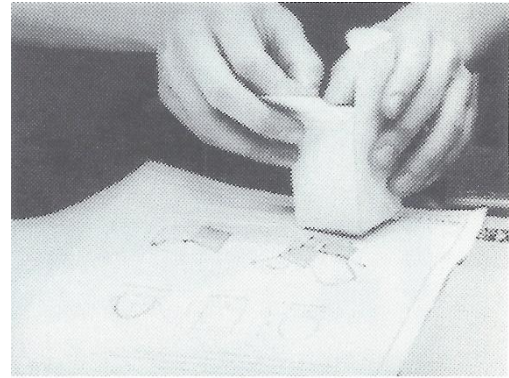
Many other investigations confirm this contrast. Britain does well for its best pupils, but pupils of average or below average ability are getting a poor deal.

2.6

Researchers from the National Institute of Economic and Social Research (NIESR) have been particularly concerned about poor teaching of arithmetic when compared with Germany. For example, by the time they are 15, 70 per cent of German pupils in the lower half of the ability range can give the correct answer to fraction division sums, such as  $18\frac{3}{5}$  divided by  $7\frac{3}{4}$ . In England only about ten per cent of pupils in the lower half of the ability range could divide  $1\frac{1}{3}$  by  $\frac{8}{9}$ . Even when this simpler sum was put to all



- A 15-year-old German apprentice easily mastering part of the GCSE Technology paper and in the process finding an error in the set examination.



15 year-olds in England, still only 40 per cent could answer it. (Prais, SJ and Wagner, K 1985, *Schooling Standards in England and Germany National Institute Economic Review*, No 112.)

2.7

The shortfall in arithmetical competence at this age obviously makes subsequent vocational education difficult in both technical and commercial fields.

higher real incomes. Surprising as it may seem, similar differences in efficiency were found by NIESR in comparing samples of medium-sized hotels in Britain and Germany resulting from more highly qualified hotel and catering staff in the latter. (Steedman, H and Wagner, K, 1987, A second look at productivity, machinery and skills in Britain and Germany, *National Institute Economic Review*, No 122.)

## ECONOMIC CONSEQUENCES

2.8

Detailed comparisons by NIESR researchers of matched samples of plants in Britain and Germany – manufacturing such items as motor vehicle components, kitchen furniture, women's clothing - have shown how a more skilled workforce leads to higher real output. Machinery is better maintained, there are fewer breakdowns, the workforce is more flexible, production is organised more systematically. The result is a more reliable product, there is greater output per person employed, less rush and fuss at work, and

## HOW IS IT DONE?

2.9

When teachers on the Continent are asked to account for the comparatively high attainment of most of their young people, they usually refer to features commonly found in other European schooling systems, but absent from English education.

- Teaching groups of roughly similar abilities; repeating of years.
- Different pathways, reflecting academic,

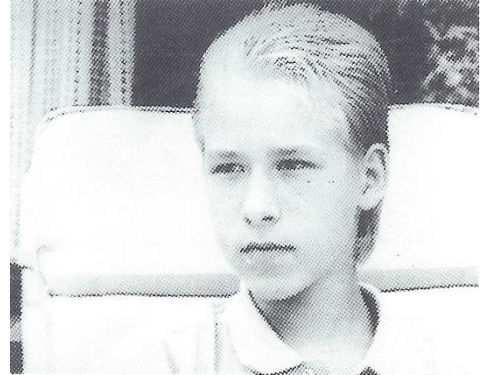


Granada Televisión

- Dutch 15-year-old Menno Barrevald had to repeat a year at his lower technical school due to a bereavement in the family which left him falling behind in his school work. He felt it was important to repeat the year to ensure he got his diploma.

technical or vocational goals, open to youngsters from the age of 12-14 onwards; invariably the vocational tracks, and often the technical tracks, begin with basic, practical studies before progressively introducing higher technology, (precisely the approach now being forced out of British schools).

- Access to the pathways is by choice; teachers provide parents with guidance (assessment tests are also often used for this purpose) but parental choice is paramount.
- Progression along pathways depends on performance and there is often a settling down from more demanding tracks to less demanding ones.
- Bridging and transfer mechanisms exist which allow youngsters to move from one part of the system to any other point, although this will often involve some pupils taking longer.
- The mark at the end of the school year, which determines whether a pupil is ready to move on to the next year, depends on all his subjects;



Granada Televisión

- Dutch 13-year-old David Krwibienier could have chosen academic education but opted instead for a vocational school where he was hoping to specialise in electronics.

- a pupil cannot give up on a subject, say maths, simply because he or she does not like it.
- There is a range of school leaving diplomas closely tied in with future job opportunities.
- The labour market is so organised that clear standards are demanded in all occupations, standards that are highly dependent on success in the education system.

2.10

Although other European education systems differ in their detailed structure, it is striking how many systems include the above features.

2.11

In short, at the end of the first half of their secondary schooling, usually at age 14, most other European youngsters are offered a variety of different paths to a range of real prizes from the education system. The prizes are designed to lie within youngsters' reach if they are determined to achieve them. It is widely felt that this clearly motivates the majority to meet the much higher demands made on them.



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- German teachers and educationalists discuss the new English GCSE Technology paper with members of the Commission. The Germans regarded it as being more suitable for their 12 and 13 year-olds.

## DISCUSSION

2.12

Inevitably there are difficulties with many of the features described above:- obliging pupils to repeat years can cause problems for pupils and their teachers; bridging and transfer mechanisms can prove imperfect in practice; academic pathways still command more respect among parents than technical or vocational pathways.

2.13

However, the impact of such difficulties should not be exaggerated. In France by age 16, half of all pupils have had to repeat a year, yet 90 per cent of 16 year-olds choose to stay in full-time education. Equally, in Holland virtually all pupils having to repeat a year go on to complete their school leaving diploma successfully at 16 and many of these also choose to stay on in full-time education. In Germany, perhaps as many as a third of those reaching university have done so despite – or perhaps because of – repeating a year.

Throughout Continental Europe too, however imperfect bridging and transfer mechanisms may be, a significant number of young people make use of them to reach far higher educational goals than they might originally have thought possible.

## CONCLUSION

2.14

The features described above, found in most other European education systems, not only attract wide support from both teachers and parents in those countries, but seem to be associated with much higher motivation and attainment on the part of many more pupils than is the case in Britain.

2.15

The Commission therefore believes that the potential advantages of such features far outweigh any possible disadvantages. It believes Britain, while mindful of its particular inheritance, must begin to introduce similar features into its education system.

# 3

# What should be done

## CURRENT PLANS

3.1

The Commission recognises that the present education policies of all three main parties include much that is valuable. But it believes none has yet fully grasped the significance of the European experience and been able to turn such understanding into meaningful policies capable of closing the gap that now exists. The Commission, therefore, puts forward the following recommendations in an attempt to focus national debate on what it believes to be the key issues for British education.

## POLICY PRINCIPLES

3.2

Our recommendations are derived from these principles:

- The country's fundamental educational problem lies – not at the university level – but at the primary and secondary school levels. We advocate a system of schooling based on pupils' attainments and career ambitions.
- To make learning more attractive, the curriculum for pupils from about the age of

14 must be made more relevant to their likely activities after compulsory schooling. This will involve clearer choices between distinct pathways.

- For teaching to become more effective (and more attractive to teachers), we must make the task of the teacher easier. This involves ensuring that pupils in each class are of much more even attainments than at present.
- Schooling attainments must be made more easily understood by parents, pupils and employers. In order that they are valued, the examinations must be rigorous at all levels of attainment. The result of externally-marked tests should be reported separately from course-work assessed by the pupil's own teacher. School-leaving qualifications should be based on *average* attainments in a broad and balanced group of subjects (rather than certificates for individual subjects only as at present).



*Braiswick Photographic Company Limited*

- The latest generation of children at Roding Junior School, Dagenham, the school Alan Smithers attended. As things stand, fewer than one in six of these children will succeed at school and go on to higher education. Perhaps over half will leave school with no meaningful qualifications.

# Recommendations

## ONE

Primary schools should above all provide the learning tools necessary for the more detailed work of the secondary school. English and basic arithmetic must be at the centre of the primary curriculum. Before moving on to secondary education, children should have to demonstrate their readiness for it in terms of basic competence in literacy and numeracy, even if that means staying an extra term, or even a year, at primary school.

## TWO

We regard assessment as integral to learning. Diagnosis *en route* would be the responsibility of teachers; but during and at the end of primary schooling we envisage testing, based on reliable external tests.

## THREE

Progress from one year to the next should be related to attainment rather than just age. Classes in both primary and secondary schools should be organised so that the pupils in them are of similar attainment, even if that means a somewhat wider spread of ages. This will facilitate learning and use teachers' and pupils' time more effectively. Pupils would be stretched, and their potential would be realised to a greater extent. Those below the minimum standard of attainment at the end of a school year should have a chance in the summer holidays to show they have caught up. There should be local arrangements to help slower learners improve;

for example, teachers might be paid to provide extra tuition outside normal school hours. Since all children (under our policies) would have demonstrated their readiness for secondary school education, there should be smoother transition than at present and less time wasted in the first year of secondary school.

## FOUR

The Commission sees the changes that it recommends (which are for immediate application) taking place within existing school structures. In time, some schools might to some extent specialise for older pupils – 14 to 16 years – in one field or another. Some, for example, might provide a greater selection of humanities, others commercial courses, and yet others music or electronics courses. We can see advantages in smaller schools or 'houses', within schools, of around 600 pupils, where the head can know all the pupils. We believe this is important for good relations between staff and pupils and for the development of a humane and orderly environment for learning. We do not envisage a return to direction by the LEAs to different types of secondary schools on the basis of examination at 11+. Parents would choose secondary schools on the basis of advice from teachers, as is commonly the case in Europe.

## FIVE

In the first three years of secondary school all

pupils would follow a common national curriculum (ie. specific subjects which must be studied) occupying about two-thirds of the timetable, with the other third settled locally. The core content of half to two-thirds of each subject for each year of study would be specified (rather than, as now, there being vague all-encompassing attainment targets). By narrowing the specific syllabuses for each subject it should be possible to ensure that all children gained mastery of the essentials of each subject. Although all children would take the same subjects at this stage of their schooling, the detailed syllabuses for each subject might differ according to previous attainment.

## SIX

Progress through lower secondary school (the first three years of secondary schooling) would depend on reaching, at the end of each year, a specified level of attainment (which would be within the compass of the great majority of pupils providing they worked hard). During the first two years assessment would be internal, but in the final year of lower secondary schooling there would be external examinations. The level of attainment would be in terms of marks appropriately averaged across subjects, with failure to reach a minimum standard requiring re-sits at the end of the summer holidays or, if necessary, repeats of the school year. The opportunity of repeating is

important as a means of ensuring eventual success. It would be a mistake to see it starkly as a punishment for failure. It could be that a whole year would have to be taken again, but it may be possible to organise the work so that only shorter units are repeated. (Further detailed study of experience abroad is needed to devise alternative paths to help slower pupils catch up to the designated standard for each year.)

## SEVEN

With a narrower spread of pupil attainments, it will become easier for the teacher to spend a greater portion of each school-period teaching the class as a whole; rather than breaking each class into groups working at different levels. This should make it easier to maintain systematic teaching. We also recommend that teachers modify their teaching styles to promote a more ordered teaching environment as observed in continental schools.

## EIGHT

At the upper secondary stage (from age 14 onwards for most pupils) there would be three inter-connecting pathways: the academic, the technical and the vocational. Pupils and their parents would choose the pathway to be followed with the help of both advice from teachers and the external assessments at the end of the first three years of secondary schooling.

- The academic pathway would derive from that existing now with GCSEs combined into a diploma based on a core of English, maths, science and a foreign language, plus other subjects as options. It would be rigorous and a good introduction to A levels.
- The technical pathway would seek to develop talents for making things, designing things and being good with people. It would be based on the same core of subjects as the academic pathway but would offer a different cluster of options. These would include practical courses, such as those now available under GCSE (for example, motor vehicle studies, technical drawing and commerce) but which are in danger of getting lost in the new proposals for technology in the National Curriculum. This pathway would also be rigorous and a good introduction to A level, particularly in technological subjects.
- The vocational pathway would be similar to the technical one, but would involve greater specialisation in the work the young people might move into. It would take place in a combination of educational and work settings, with interested employers being paid to participate. In the first year young people might spend one day a week in employment, and, in the second, two. Youngsters would have the opportunity of experiencing several different kinds of work. There would be rigorous testing of standards attained, including tests of practical work. The final examination at the

end of this pathway would enable the holder to enter the technical pathway if he or she wished.

The pathways differ essentially in the clusters of subjects around the prescribed core. There would be ample opportunities to move between them, though switching might involve taking longer to reach certain qualifications.

## NINE

Choice at 14 would be open only to those who had succeeded in reaching a minimum standard in the external examinations at the end of lower secondary school. The choice of a technical or vocational pathway would be entirely voluntary and made by youngsters who could, as of right, have chosen the academic pathway. Whichever path was chosen it would mean meeting minimum targets across a full range of subjects, and failure to do so would involve re-sits or repeats. Passes at 16 would be the first rungs on the ladders to the next stage of education or into employment.

## TEN

A small minority of youngsters (the experience of other countries suggests five to eight per cent) might not reach the minimum level at the end of the lower secondary school, even after repeating a year. They would go on to special pre-vocational/remedial education.

This would give them a choice of either continuing with full-time education when they were ready for it, or leaving school at any age after 15, provided always that they went to work with employers who guaranteed approved training provision.

## ELEVEN

Examinations at age 16 would be developed from the best of GCSE combined with the best from the vocational field, with new papers as necessary. O level syllabuses (which are still set by examination boards in this country but only for pupils resident abroad, such as in Hong Kong) should also be considered. The technical and vocational examinations, like the academic, should involve independent external assessment. The vocational track would involve written as well as practical examinations. The examinations would be administered by existing boards, with some input from employers. Standards across examining bodies would be monitored by a National Examinations Board.

## TWELVE

Beyond the age of 16, after compulsory schooling, both the academic and technical tracks would lead to A and AS examinations. Existing technical A levels may need to be modified and modernised and new technical A levels would need to be introduced. Pupils

differ, with some having a particular bent and others being all-rounders. We should, therefore, have a system which permits both specialisation and breadth. This could be achieved by having a norm of four or five subjects at A level, or some combination of A and AS examinations.

## THIRTEEN

Whilst we advocate an extension of education and training experience, we recognise that it is at present difficult to keep all young people in school to age 16. We therefore do not wish to recommend raising the leaving age to 18. However, the employment of young people up to that age must be regarded in part as training, and opportunities and wage levels should reflect this. We would think therefore of operating a system of 'negative compulsion' with young people allowed to be employed only by firms offering approved training. This would include day-release for attendance at college for approved courses, plus a designated qualified person at work who would be in charge of trainees. Young people would be given every opportunity to acquire further vocational qualifications. Wage levels for young people would be set by the market, and we would expect them to settle down at less than the salaries of those who are fully qualified. A subsidy of the YTS-type will be necessary for some years while the new system is put into operation, but ultimately this should be removed (as in Germany).

## **FOURTEEN**

Success in the technical pathway at 18 would give pupils access to higher education, just as success in the academic pathway would do. Although success in either the technical or the academic pathway would give an edge in certain subjects, it is important that there should be provision for transferability within higher education for pupils who have followed one pathway at A level and wish to study a subject from the other pathway at university. Success in the vocational pathway at 18 or later would give access to higher education, following bridging courses, which would open the way to the full range of degree courses.

## **FIFTEEN**

It is of the greatest importance that our national vocational qualifications, at all levels, should, as in the rest of Europe, require passes in written examinations. This is important in itself, as part of the competence to be expected of a qualified craftsman or technician, and is also important in ensuring that young people do not close off access to higher education.

## **SIXTEEN**

Because technical and vocational schooling tend to be more expensive than academic schooling, the Commission would expect some re-allocation of resources, which could involve some limited transfer away from academic education to improve provision in other areas. The development of the technical and

vocational pathways will require an increase in the supply of appropriately qualified teachers. In the short term it may be necessary to recruit from the ranks of the newly retired from industry and commerce who have the relevant skills, as in Germany where master craftsmen are employed for this purpose.

## **SEVENTEEN**

The new pathways and qualifications will only have appeal if they mean something and lead somewhere. Employers and teachers will have to co-operate more closely than hitherto to establish a framework in which the proposed technical and vocational qualifications lead as naturally into skilled employment as to the next stage of education.

## **EIGHTEEN**

Registration schemes for qualified craftsmen and technicians, in the way that now exists for some professions, would give added impetus to the development of the technical and vocational pathways. Registration would help consumers; and it would raise the status of the occupations to which it applies. If, in order to practise as a registered plumber (unregistered plumbers could still continue to practise), you had to demonstrate competence and, acquire certain qualifications, then there would be greater incentive to acquire those qualifications. Registration schemes of this kind could be introduced gradually, giving current practitioners a chance to qualify.

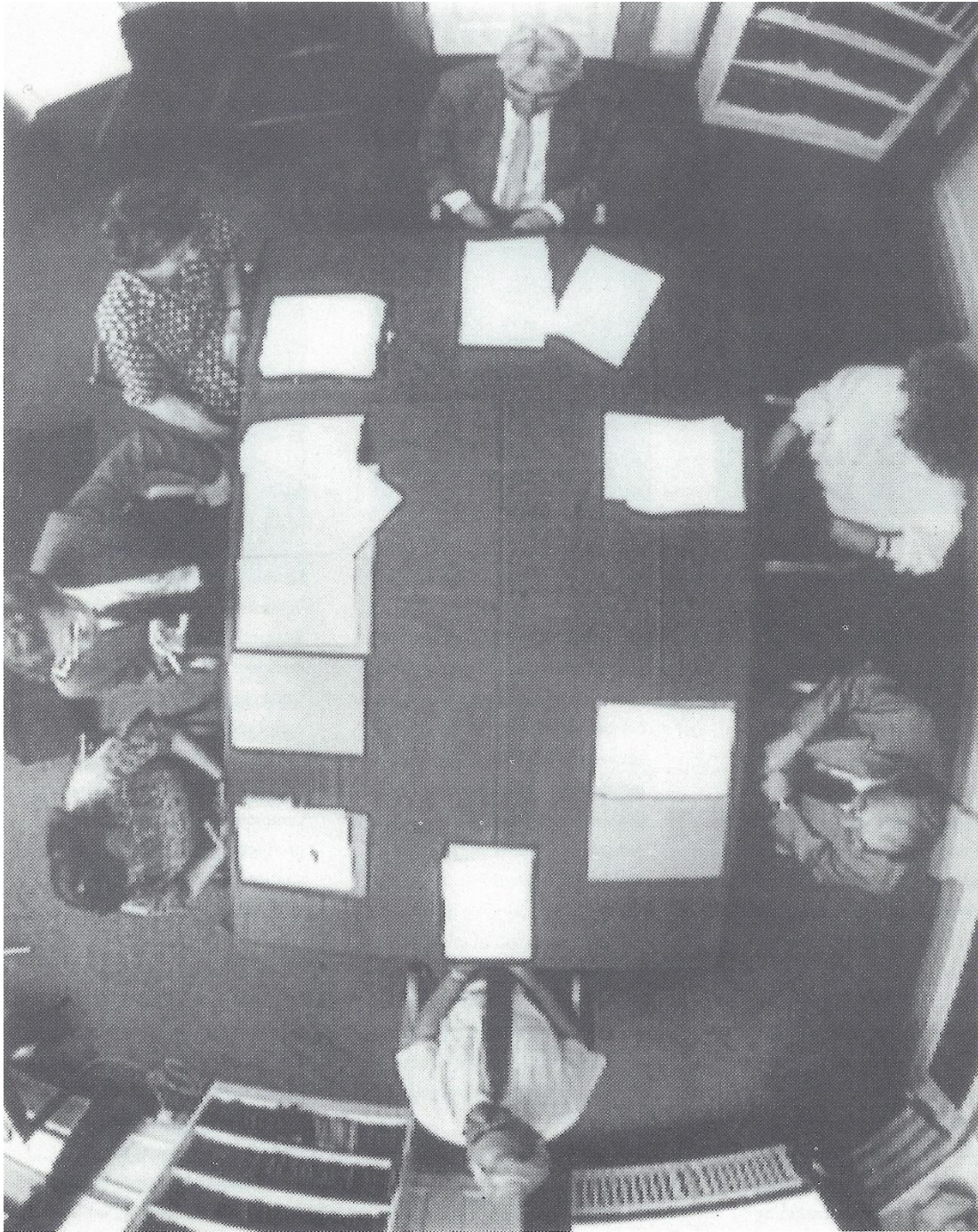
# In conclusion



Nicky Johnston

- The Commission at work.

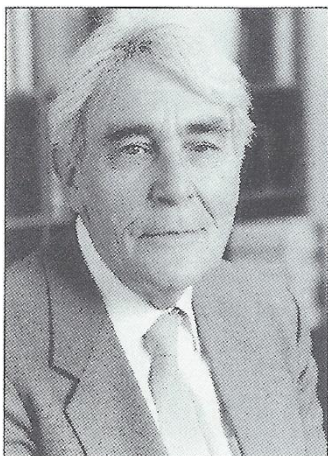
The Commission has concentrated on recommendations which could be set in motion during the next 18 months so that children due to start secondary school in September 1992 would progress through the new system. By the end of the life of the next Government, British schooling would have been transformed. Such a transformation would not only make possible a major improvement in our economic position but, at least as important, help to give dignity to many of our young people who today look upon themselves as failures. Getting the education system right would improve the quality of life (not just livelihood) for the next generation and beyond.



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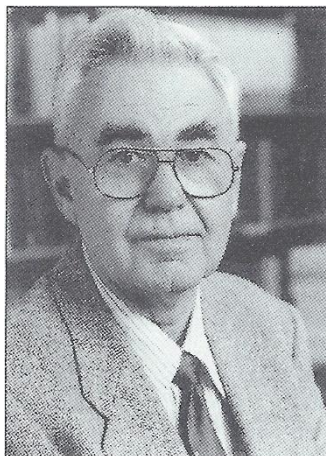
- Taking an overview – the five members of the Commission plus supporting staff.

# The Commission members



**A H HALSEY**

Emeritus Professor, University of Oxford and Fellow of Nuffield College. Formerly Professor and Director of the University's Department of Social and Administrative Studies. Life-long supporter of the Labour Party's reforms of education, especially expansion in its service of equality of opportunity and comprehensive secondary schooling. Critic of private schooling in Britain as an inheritance of unfair privilege. Adviser to C A R Crosland as Secretary of State for Education; Chief Examiner and Rapporteur of the Organisation for Economic Co-operation and Development's (OECD's) reviews of education in USA, California, Finland and Yugoslavia. Currently researching access to higher education by international comparisons.



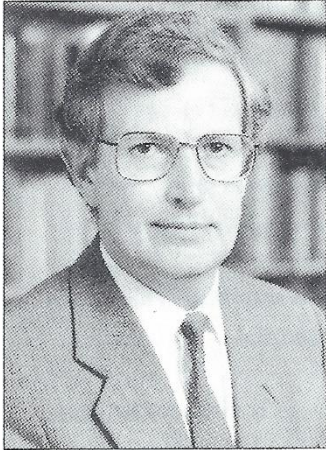
**NEVILLE POSTLETHWAITE**

Professor of Comparative Education at the University of Hamburg since 1976. Between 1972-6 he worked at the International Institute for Educational Planning in Paris and between 1962 -72 worked for the International Association for the Evaluation of Educational Achievement (IEA) in Hamburg and Stockholm.



**S J PRAIS**

Senior Research Fellow, National Institute of Economic and Social Research, London; Visiting Professor of Economics, City University; Fellow of the British Academy. For the past decade he has led a research team at the National Institute researching into comparative industrial productivity in Britain and Europe and into the relation between productivity and vocational training and education. The resulting research reports have influenced the Government's policies on Youth Training and the National Curriculum. He has spent ten years in manufacturing industry in the Midlands; has been an economist at the International Monetary Fund; and served with the United Nations Technical Advisory Board.



**ALAN SMITHERS**

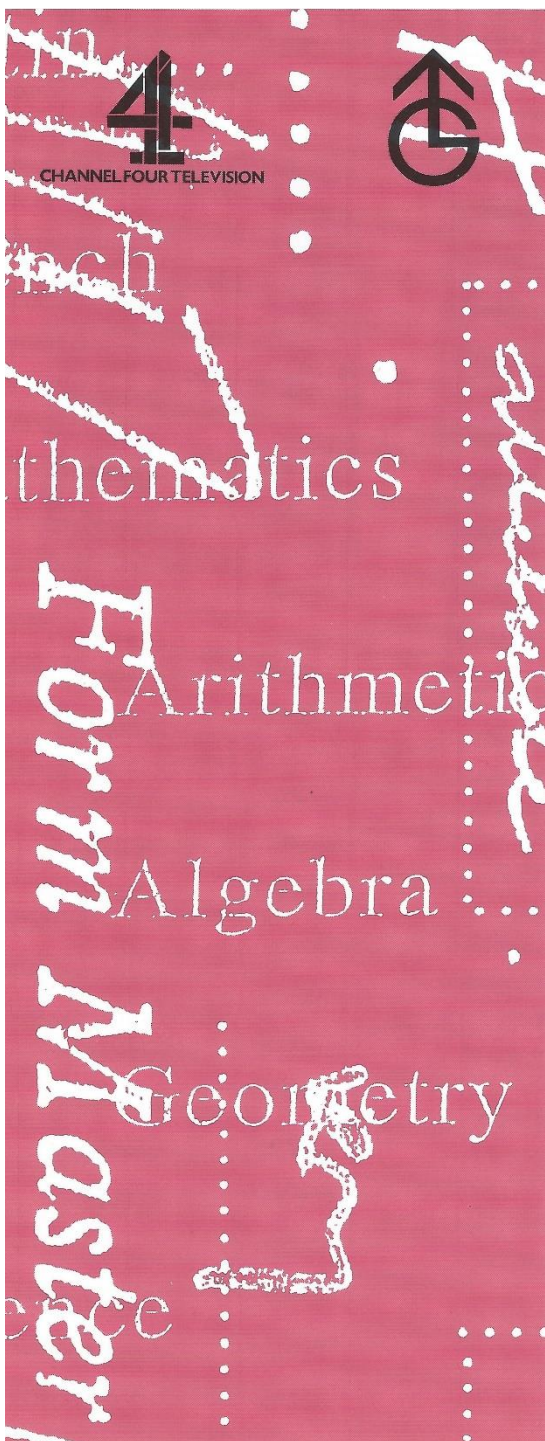
Professor of Education, University of Manchester and leader of a research team which specialises in quantitative and accessible reports. In the last five years it has received commissions and funding from 36 organisations, including Government departments, professional bodies, employers and charitable foundations. Professor Smithers has no political attachments, and has been consulted by all three main parties. Recent influential publications include studies of teacher supply, science and technology manpower, access to higher education, vocational qualifications and graduate employment.



**HILARY STEEDMAN**

Senior Research Fellow at the National Institute of Economic and Social Research. Her career includes work as a teacher in primary and comprehensive schools, in teacher training and as a Lecturer at the University of Salford. At the National Institute she has carried out research comparing schools, training and productivity in Britain and Continental Europe. She was a member of the Government's Task Group on Assessment and Testing and, until July 1991, of the School Examinations and Assessment Council.

*All photos Nicky Johnston*



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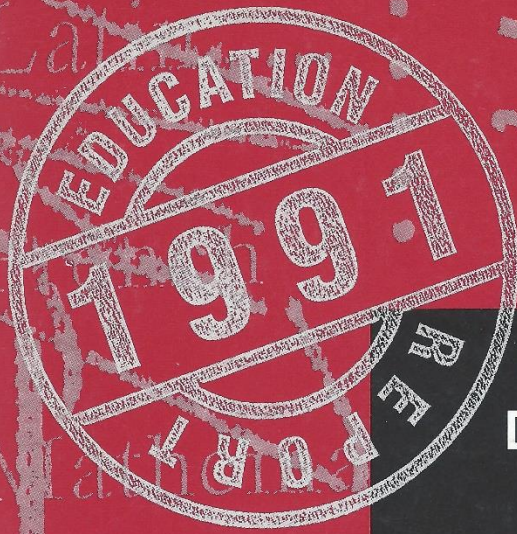
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