

# **GENERAL STUDIES**

## **BREADTH AT A-LEVEL?**

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## Acknowledgements

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## Foreword

*This report concludes that the 1950's solution to the perceived narrowness of the A-level system of a norm of three subjects, that of trying to create breadth by the addition of General Studies as an extra subject, has not been entirely successful.*

*The findings of this report provoke renewed thoughts about breadth at A-level and how it should be achieved.*

*This is against a background of emerging Government policy for education 16-19, which seems to be based on three main qualification pathways: A-levels, General National Vocational Qualifications, and National Vocational Qualifications.*

*However it is likely that, in the short term at least, A-levels (or possibly their successor) will continue to be a major route to engineering courses at university. In 1991, 64% of engineering admissions to all universities (including the former polytechnics) were on the basis of A-levels compared with 18% on vocational courses.*

*The issues raised by General Studies: Breadth at A-level? are important and deserve serious and informed discussion. The Engineering Council is therefore pleased to publish the report, since it is itself considering the whole question of breadth in education 16-19.*

A handwritten signature in blue ink, reading "Denis E Filer". The signature is fluid and cursive, with a long horizontal flourish underneath the name.

**Denis E Filer CBE TD FEng**  
*Director General, The Engineering Council*

## Summary

*Taking the examination papers as exemplifying the objectives of A-level General Studies, it appears to be more a mosaic of specialisms than an attempt to understand and bring together the different ways of making sense of the world. Although General Studies is claimed to be fair across different groups, we found large discrepancies in favour of scientists and males. Neither could we support the claim that it is a good predictor of capacity to benefit from higher education. While we did find highly significant correlations between A-level and degree results in the subjects themselves, this did not hold for General Studies.*

*General Studies can help to secure a place in higher education, but not always, and usually only as a third or fourth A-level. It tends to be regarded by university admissions tutors as an A-level that is not quite a real A-level. This ambivalence seems to extend to schools which treat it with varying degrees of seriousness. It was not included in the 'league tables' of A-level examination results. We therefore have the paradox of more than fifty thousand students a year taking a 'qualification' that appears to count for very little.*

*General Studies tries to bring more breadth to A-levels by offering it as an extra subject. It cannot be said to have been entirely successful and the time has come to look at alternatives. Seven are considered and it is suggested that the one to be preferred will depend on the reasons for seeking more breadth - which need to be made explicit.*

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## Introduction

1. English sixth form education is distinctively specialised. It is usual for young people in the final years of upper secondary schooling to take only two or three subjects compared with the range studied in the German Abitur, French baccalauréat, Italian maturita, or indeed the leaving qualifications of Japan and USA. Historically, this came about because we reacted rather differently to the knowledge explosion of the nineteenth century from our continental neighbours. Whereas they added new subjects to the curriculum, we created ‘sciences’ and ‘modems’ as alternatives (implicitly inferior) to the “grand old fortifying curriculum in the Classics”<sup>1</sup>. When A-levels were introduced in the 1950s, specialisation was regarded as natural: “It is one mark of the good and keen Sixth Former. He has looked forward to being a science specialist, or a classic, or a historian: his mind has been set that way by inclination and the main school mechanisms”<sup>2</sup>.
2. But the extent of specialisation has nevertheless been questioned from time to time<sup>3</sup> and there have been a number of attempts at introducing more breadth. The one that has operated for most of the life of A-levels is General Studies which tries to achieve more breadth by offering it as an extra subject. On the face of it, it has been very successful having among the highest A-level entries. Yet it is regarded with a curious ambivalence. Although taken by a lot of pupils, schools seem to differ considerably in the seriousness with which they treat it, higher-education admissions tutors do not always accept it, and the ‘league tables’ of schools’ A-level results ignored it.
3. The time has come to take stock. The contribution of General Studies has never been fully evaluated, and it seems important to do so particularly in relation to the changing structure of post-16 education, both in terms of institutions and qualifications.
4. General Studies has been a schools’ solution to breadth; further education colleges, while they sometimes have had liberal arts departments, have tended to do things rather differently. In 1991, only 2.9 per cent of General Studies entries came from the further education colleges and 2.6 per cent from the somewhat similar tertiary colleges. From 1 April, 1993, a new sector of education - Further Education - has been instituted with its own Funding Council. This will have more A-level candidates than the schools. Sixth form colleges (previously administered under school regulations), which, in 1991, contributed 16.8 per cent of General Studies entries, have been included in the new sector. What part will General Studies play in the future of these colleges? For that matter what will be its future in schools?
5. In terms of qualifications, government policy post-16 seems to be based on three broad qualification pathways: A-levels, General National Vocational Qualifications (GNVQs) and National Vocational Qualifications (NV Qs). General Studies has been an attempt to bring breadth to the A-level route by bridging the arts and sciences. More recently ‘breadth’ has come to be interpreted as bridging the academic and vocational. This has led to attempts to re-cast General Studies as a way of assessing the Technical and Vocational Education Initiative (TVEI) with modules in ‘work/enterprise’ and ‘community’. There has also been some tendency to replace General Studies by GNVQ units as a way of accrediting supporting studies.

6. In this report we assess - through a survey of General Studies in action in 30 schools, including interviews with 44 teachers and 300 pupils; analysis of the A-level examination entries of the Joint Matriculation Board (now the Northern Examinations and Assessment Board); a study of the admission policies and practices of higher education institutions, in particular in eight subjects across ten universities and colleges; analysis of the A-level and degree results of over 2,300 students; and scrutiny of published documents, examination papers and national statistics<sup>4</sup> - the part played by General Studies in bringing more breadth at A-level. This of course poses the prior question: what is 'breadth'? Although there are frequent pleas for more of it, it is not always clear exactly what is being sought. We consider General Studies in relation to six other possible approaches and suggest that the way forward depends crucially on clarifying the purposes and desirability of 'breadth'.

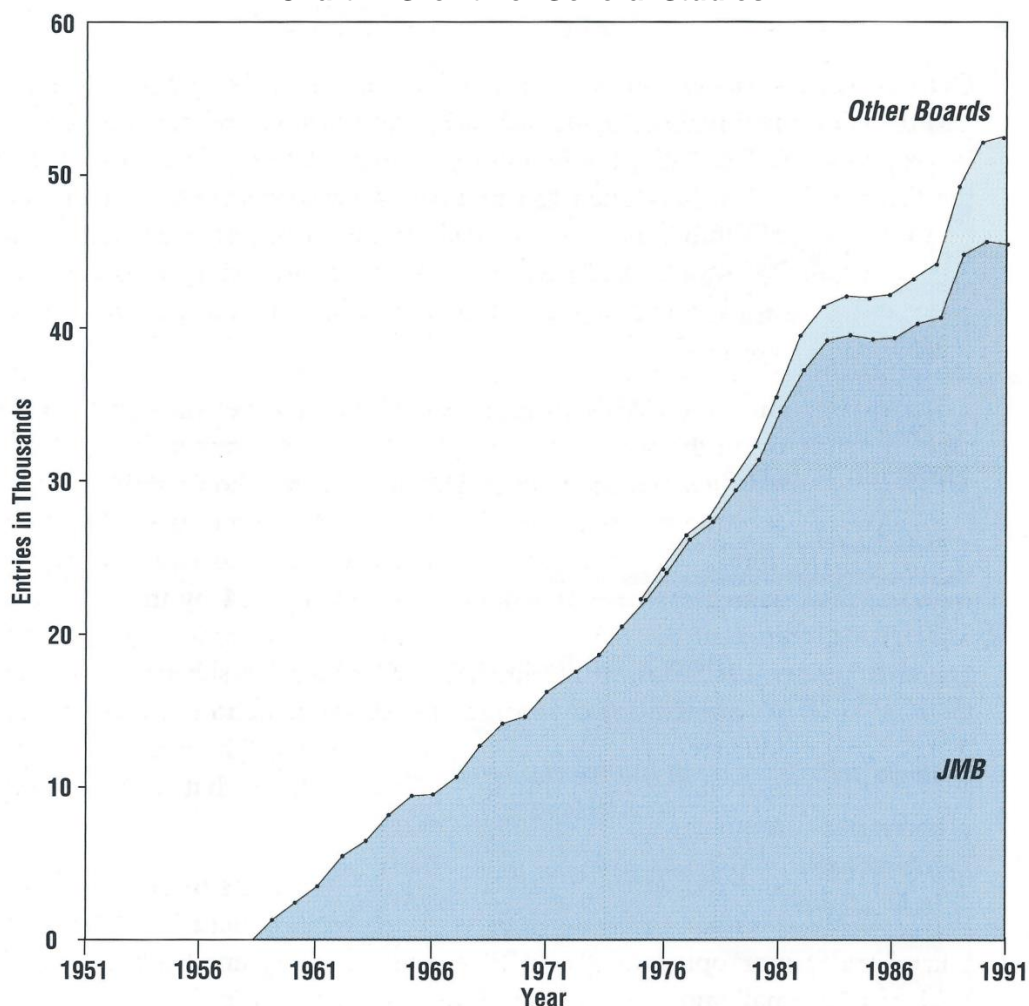
## Origins as an A-Level

7. General Studies was invented as an examination subject by the Joint Matriculation Board. Following the encouraging reception given to a general paper at ordinary level in the period 1951 to 1955, the Board approved an A-level<sup>5</sup> which was examined for the first time in 1959. It aimed to encourage a broader sixth-form curriculum and promote General Studies as an entry qualification for higher education; at the same time it hoped to attract candidates who were not intending to go on to higher education. In short, it sought to give a focus and identity to non-specialist studies in the sixth form.
8. The introduction of the JMB's exam coincided with a developing lobby to promote general education in the sixth form. In 1961 Boris Ford launched the Agreement to Broaden the Curriculum whereby some 360 secondary schools publicly committed themselves to devoting at least one-third of sixth-form time to studies outside the specialist curriculum. In 1962, the General Studies Association was formed to promote the teaching of General Studies, followed in 1964 by the General Studies Subject Committee of the Schools Council. In two reports, in 1960 and 1962, the Secondary Schools Examination Council (SSEC, which was subsumed by the Schools Council in 1964) warned of the dangers of over-specialisation "carried to a point at which general education is in jeopardy", and recognised "the importance of general education in the sixth form and the value, for the schools that wish to make use of them, of these examinations"<sup>6</sup>.
9. Between 1966 and 1978 the Schools Council issued a series of discussion papers on the sixth form curriculum<sup>7</sup>. In all the proposals for re-structuring A-levels, through 'major' and 'minor' options, 'Q' and 'F' levels ('qualifying' and 'further'), and 'N' and 'F' levels ('normal' and 'further'), the future of General Studies was never seriously questioned. In the 1969 paper it was recognised as a distinctive area of study with its own rationale, method and content and, in 1972, it was suggested that it was essential to a balanced curriculum, having both *integrative* and *compensatory* functions. That is, General Studies was seen as both providing common ground for the arts and science specialists and making up deficiencies. Its value was again taken as self-evident when Advanced Supplementary examinations were introduced in 1987, which since they provided an opportunity to study more subjects could be seen as an alternative approach to breadth. General Studies was, in fact, one of the first ASs to be approved.

## Growth in Popularity

10. Judged in terms of the number of candidates, General Studies is a very successful A-level. Since its introduction in 1959 the number of entries has grown continuously, reaching 54,355 in 1992. Although the JMB has been joined by other boards, as we can see in Charts 1 and A1 (in the appendix), it still accounts for nearly 90 per cent of the entries. Since 1959, numbers in the sixth form have quadrupled, but General Studies has more than kept pace. Chart 2 shows that currently about 30 per cent of school-based A-level candidates take it.

Chart 1: Growth of General Studies

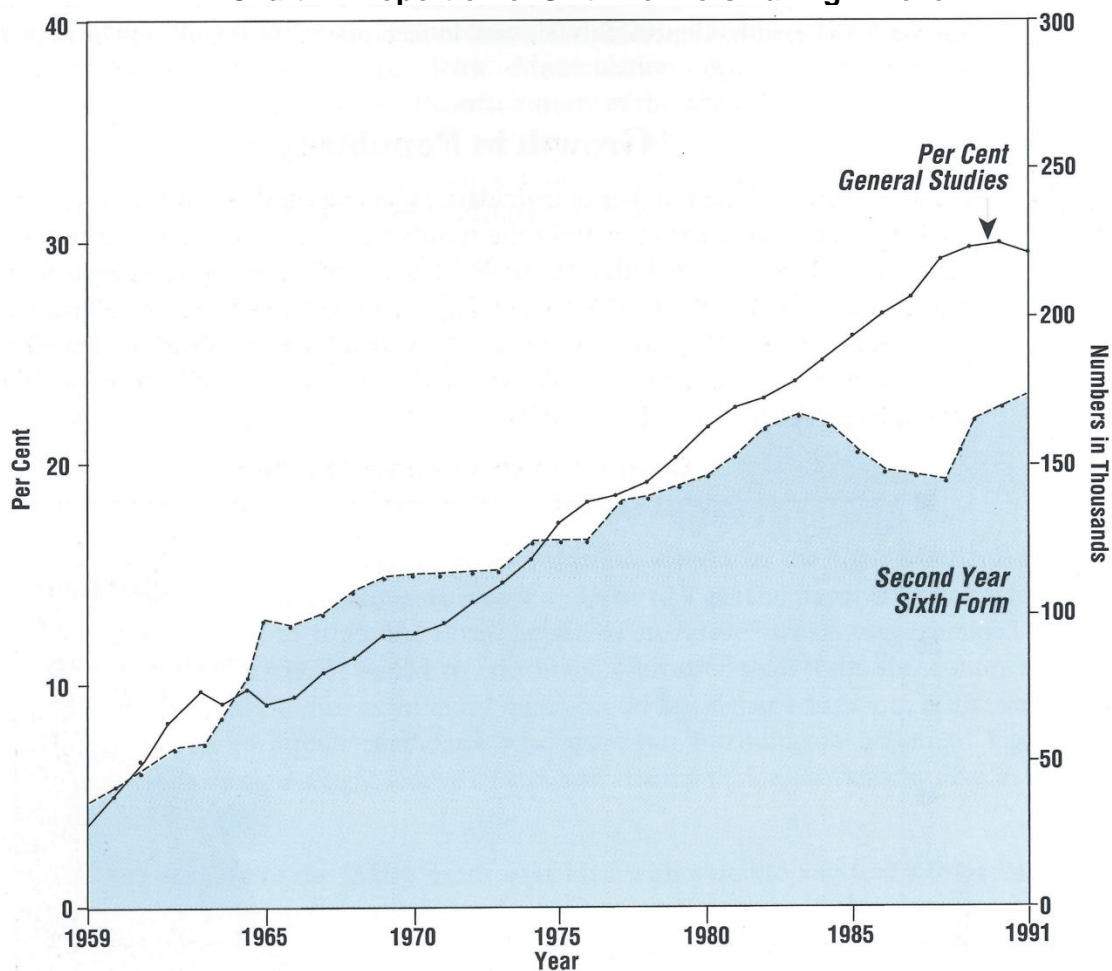


1. England and Wales; includes FE.

Source: Annual Reports of JMB and Annual Statistics of AEB, ULEC, UCES, UODE.

11. In popularity, General Studies, as we can see in Chart 3, is second only to mathematics (which has a variety of syllabuses) among the A-level subjects, and curiously, it is also second among the AS entries which themselves are an approach to breadth. However, as Chart 3 also brings out, ASs have not really caught on. The small number of entries are scattered across a great variety of subjects, sometimes

**Chart 2: Proportion of Sixth Formers Taking A-Level**



1. England and Wales, schools only.

Source: Ministry of Education Annual Reports, 1959-60, HMSO; Statistics of Education, Schools, 1961-91, DES; Statistics of Education, Wales, Schools, 1980-91, Welsh Office; Annual Statistics, AEB, ULEC, UCES, UODE; Annual Reports, JMB.

**Chart 3: Top Ten A-Levels and AS Exams,<sup>1</sup> 1991**

Subject	A-Level		AS-Level <sup>2</sup>	
	Rank	N	Rank	N
Mathematics	1	70,249	1	13,523
General Studies	2	52,635	2	9,243
English Literature	3	50,617	21	876
Biology	4	47,772	4	2,123
History	5	45,600	14	1,030
Chemistry	6	45,128	20	883
Economics	7	44,679	10	1,364
Geography	8	44,196	15	980
Physics	9	43,997	5	1,988
French	10	31,372	3	2,950

1. Entries including those not present on the day.

2. Subjects in first 10 ASs not listed among first 10 A-levels: 6, Chemistry 1,856; 7, English 1,764; 8, Sociology 1,754; 9, Psychology 1,434.

Source: Inter-Board Statistics, AEB.

mainstays like maths, French and physics, sometimes in subjects new to the students like computer studies, sociology and psychology. In spite of the introduction of ASs, General Studies has maintained its position as the second most popular A-level, and has also become the second most popular AS.

## General Studies as a Subject

12. What is General Studies? From the first it seems to have embodied a variety of aspirations: to broaden students' understanding, alert them to current issues, explore connections, consider relevance, and also to continue with subjects that might otherwise have been dropped. What seemed to unite them was a belief in the value of the generality of subject matter. There was, however, some tendency to confuse general education with general knowledge:

“We shall not solve the problem of combining general education with the requisite skill or understanding in a specialist field until we cease to think of general education in terms of general knowledge. It is not a sign that a man lacks general education if he does not know the date of the Treaty of Utrecht, the latitude of Singapore, the formula for nitro-glycerine or the author of *The Four Quartets*. It does denote a lack of general education if he cares nothing for any of the Arts, confuses a moral with an aesthetic judgement, interprets the actions of Asian political leaders in terms of nineteenth century English parliamentarianism or believes that the existence of God has been scientifically disproved.”<sup>8</sup>

Further although general education was held to be ‘a good thing’ it was less clear what it actually meant. Conceivably, it could take a variety of forms:

- it could provide the opportunity to experience a range of disciplines including the arts, sciences and social sciences;
- it could explore different ways of making sense of the world and look at the connections between them;
- it could be concerned with current themes and issues, bringing understanding from different fields to bear on them;
- it could seek to identify the basic qualities of the educated person and try to develop them, perhaps as ‘core skills’;
- it could take the view that breadth involves bridging the academic and vocational;

and there are others<sup>9</sup>.

13. Each of the examination boards offering A/AS level General Studies sets out its aims, embracing some of these possibilities, but perhaps the most pragmatic way of identifying what General Studies actually is, is to look at the examination papers. It is clear that, as examined, General Studies consists of a collection of specialist studies. The papers of the Northern, Cambridge, and Oxford Boards, which together accounted for over 95 per cent of entries in 1992 (see Table A1, in appendix), are essentially subject-based. In the Northern Examination and Assessment Board's

(formerly the Joint Matriculation Board's) two papers, sections on the arts, sciences, social sciences, mathematical reasoning, spatial and mechanical relations, and foreign languages are assessed by objective tests and essays. (There is also the option of including internally assessed project work, and a separate test in spoken English.) The University of Cambridge Local Examinations Syndicate, which has offered General Studies since 1975, has a general paper with sections on comprehension, data response and short-answer questions plus papers on humanities and culture, and science and technology. (There is also an optional coursework section.) The University of Oxford Delegacy of Local Examinations, with an examination since 1978, has two papers each covering the arts in society, the organisation of society, and science and technology in society, together with a test of numeracy on one paper and general questions on the other.

14. The approaches of the Associated Examining Board and the University of London Examinations and Assessment Council are somewhat different. The AEB's assessment is based on six themes, 'space', 'communications', 'conflict', 'leisure', 'power', 'images', to which the appropriate forms of knowledge are applied. The London scheme (where the A-level has now been withdrawn) was also explicitly inter-disciplinary with the assessment organised around four topics: 'science and society', 'France - an area study', 'the modern movement' and 'one earth'. This is still the basis of its AS examination. The other boards also offer AS examinations which are derived from their A-level syllabuses.
15. General Studies as an examination has been primarily the first of the alternatives in para. 12, with some attempt also at alternative 3. The format has changed relatively little over the years though there are signs that the boards are responding to changing circumstances. The Cambridge board has recently been piloting in Northamptonshire and three other counties<sup>10</sup> a modular General Studies A/AS level to provide progression from the Technical and Vocational Education Initiative with compulsory modules in 'experience of work/enterprise' and 'the community' (option 5 of para. 12). It is, however, small scale with only about 75 candidates in 1992, and it has not been decided whether to make it available nationally.
16. The JMB/NEAB has also been exploring the feasibility of using General Studies as a vehicle for delivering the so-called 'core skills' of numeracy, communication, problem-solving, information technology, foreign language competence and personal skills (option 4 of para. 12). At one stage, with the issue of the School Examination and Assessment Council's (SEAC's) consultative document<sup>11</sup>, it looked as if all A-levels would have to report in terms of 'core skills'. The JMB considered that "the incorporation of core skills in all syllabuses could lead to a distortion of syllabuses and feels that a separate examination provision of these skills would better meet the needs of centres."<sup>12</sup> But more recently:

"It has become clear that there is to be no requirement for A/AS examinations to report in terms of the six 'core skills' identified by the National Curriculum Council. Nevertheless, it seemed to the JMB that centres would welcome information about the performance of their students in these skills, most of which are tested in the existing examination in Advanced General Studies. A pilot investigation is planned into the reporting of individual profiles of attainment in most of the core skills in addition to the subject grade in this subject."<sup>13</sup>

17. In spite of these developments, the impression of General Studies gained from scrutiny of the examination papers is mainly of a mosaic of specialisms. While four of the five alternatives identified in para. 12 are represented as examination papers to some extent, option 2, perhaps the most fundamental, looking at the interconnections of the different ways of making sense of the world, is not. It is however the basis of the very interesting ‘theory of knowledge’ component of the International Baccalaureate, the qualification which was inspired partly by Peterson’s reflections on the nature of general education:

“We sought not to ensure that as ‘generally educated men and women’ our students should have acquired a wide range of knowledge, but that they should have developed, as far as they were able, their power and desire to engage in a wide range of what Montaigne called ‘ways of thinking’. In other words, to quote Edgar Faure, a French Minister of Education, that they should ‘learn to learn’ ”.<sup>14</sup>

## General Studies in Practice

18. Schools mean different things by General Studies. Of the 30 schools in our sample (see appendix, para. A4), six saw it as all non-specialist sixth form work other than private study (two preferred to use the term ‘complementary studies’). Two-thirds (19 out of 30) identified General Studies as a specific programme leading to an examination. One school had both a ‘general programme’ of supporting studies and General Studies as an A-level course. The remaining four did not recognise General Studies as a category and offered little beyond the specialist courses other than sporting activities.
19. Twenty of the schools offered General Studies as an A-level subject, and in one of the others it was possible to take the examination even though no course was provided. In seven of the schools the examination was emphasised with the course closely geared to it:

*First aim is to give them another A-level. It sounds a bit clinical, but I certainly think it’s important; it’s something to fall back on.*

*(Coed, 11-18, comp)*

In one school the students even played Trivial Pursuit as practice for the general knowledge questions. But in most, in 13, the examination was treated as something incidental to providing general education:

*The aim of these courses is to extend the student’s interests beyond subject boundaries and it is hoped that such courses will help the student to see his specialist subjects in the light of knowledge as a whole and that they will help him to develop leisure and cultural interests.*

*(Coed, 11-18, comp)*

This was also the view of the six schools offering a course but no examination:

*Courses are varied in subject matter and approach. Some are designed to extend academic courses and offer a new perspective on these, whilst others give students the opportunity of developing new interests and learning new skills.*

*(Coed, sixth form college)*

The main reasons given for entering students for the examination were as an incentive and for the qualification:

*I think I'm in favour of General Studies being examined because if I didn't have it examined externally we would have less positive co-operation from the people doing the courses.*

*(Boys', 11-18, indep)*

*The General Studies points have helped a lot of our students to win places in higher education, particularly the weaker ones actually, where they've got one pass at A-level and one General Studies pass and they've managed to get on to a degree course.*

*(Co-ed, 11-18, comp)*

20. General education is often claimed to occupy a quarter to a third of sixth-form time<sup>15</sup>. But in only four schools in our sample of 30 did it approach 20 per cent. In three others the allocation was between 10 and 15 per cent, but in most it was less than 10 per cent. Moreover, there was usually no homework or specified private study which are so important at A-level. In ten of the schools the amount of time devoted to General Studies was being reduced because of insufficient resources and the competing demands of AS examinations. Only one school, an independent school in the Midlands, had decided to protect General Studies by not putting on AS courses.
21. Only two of the 26 schools offering General Studies, both sixth form colleges, had a separate General Studies department, and even here the head of one of them doubled as the head of geography. In the other 24 schools there was a General Studies co-ordinator who also often carried other responsibilities - three deputy-heads, three heads of sixth-form, 14 heads of subject departments, one TVEI co-ordinator. Three were standard-scale teachers. All but five of the staff in charge of General Studies were specialists in non-science subjects, principally English, history and geography. The problem of staffing science and mathematics in schools usually has meant that there has been little scope for deployment to non-specialist teaching. In only six schools, including the two with departments, were there regular meetings of the staff teaching General Studies, as there were for other subjects.
22. The number of staff involved in teaching General Studies varied greatly between schools from a single teacher to perhaps 14 or 15. In the boys' independent school in the Midlands, which had favoured General Studies over ASs, over 40 staff were involved, but that was exceptional. The General Studies programme in this school was given high priority by the headteacher, was well-structured, well-organised and enjoyed high prestige among staff and students alike. In eleven other schools also, General Studies was timetabled as any other subject:

*When the timetable is constructed, the same priority is given to General Studies as to other subjects. I and a colleague draw up the timetable and I'm a great believer in General Studies.*

*(Coed, 11-18, comp)*

But in 14 out of the 26, teaching was covered more on the basis that staff were free than any particular commitment or suitability to the course:

*General Studies is timetabled where it fits, where staff are free and where there are slots. It is given a fairly low priority when the timetable is being constructed. The rest of the timetable is done, and what's left goes into General Studies.*

*(Coed, 11-18, comp)*

*General Studies has been reduced this year because of resourcing problems. It is being taught by people with slack on the timetable, not by people who are particularly good at it.*

*(Coed, 11-18, comp)*

*It has always been given a fairly low priority from a timetabling point of view, and therefore it tended to be slotted in at the last moment, when the students' timetables had been worked out and when the majority of them happened to be free, and that has implications for staffing as well, in that it means who's free from the staff to teach it.*

*(Coed, 11-18, comp)*

23. In the 30 schools we interviewed 300 upper sixth-form students, 150 male and 150 female, spread in about equal proportions across the sciences, the arts and social sciences, and those taking a mixed combination (see appendix, para. A7). Well over

#### **Box A: Pupils' Views on General Studies**

##### **Broadens Outlook**

*It broadens people's outlooks beyond the subjects they're doing - otherwise you get pretty inward looking, and courses like this help you realise what is going on around.*

*(Male; economics, geography, history)*

*Personally I think it is important that I know what is going on - it helps you criticise things, analyse things, rather than just accept them. We have looked at the media and we have found it biased - I didn't realise newspapers were biased.*

*(Female; art, English)*

##### **Qualification**

*I think of it as a chore. It's a means to an end. It broadens your knowledge, but it's mainly for an A-level for higher education.*

*(Female; history, sociology)*

*The lessons were compulsory, but the attendance record doesn't bear speaking about. My main reason for doing it is another A-level, which doesn't need any revision. Something for nothing, in a way.*

*(Male; history, politics)*

*Yes, I'm doing the General Studies examination; it's voluntary. I've chosen to do it because basically it's another qualification. I feel pretty hard done by that there's no lessons. I would prefer a structured course tailored to individual weak spots.*

*(Male; economics, geography, history)*

##### **Occupies Time**

*I've not got as many study periods as some people, but they don't like us having a large number of study periods, and last year they tried to occupy our time with English, which was an absolute failure. But the General Studies course is useful.*

*(Male; chemistry, maths and further maths, physics)*

*I think the college wants you to get a better all-round education rather than just concentrating on your own subjects, and they don't want you to have too many free lessons.*

*(Female; biology, chemistry, maths)*

##### **Not Treated Seriously**

*Well, when the teachers turn up - most of them don't on time. We had a couple who didn't turn up at all. We have learned about Music, Greek, history, philosophy, law and order, education. I haven't got much out of them. What they were talking about you know already.*

*(Male; computer science, design, psychology)*

*It's just mass dis-organisation resulting in mass apathy. There's a problem of feedback; they don't know what they want to give us.*

*(Female; biology, English, geography)*

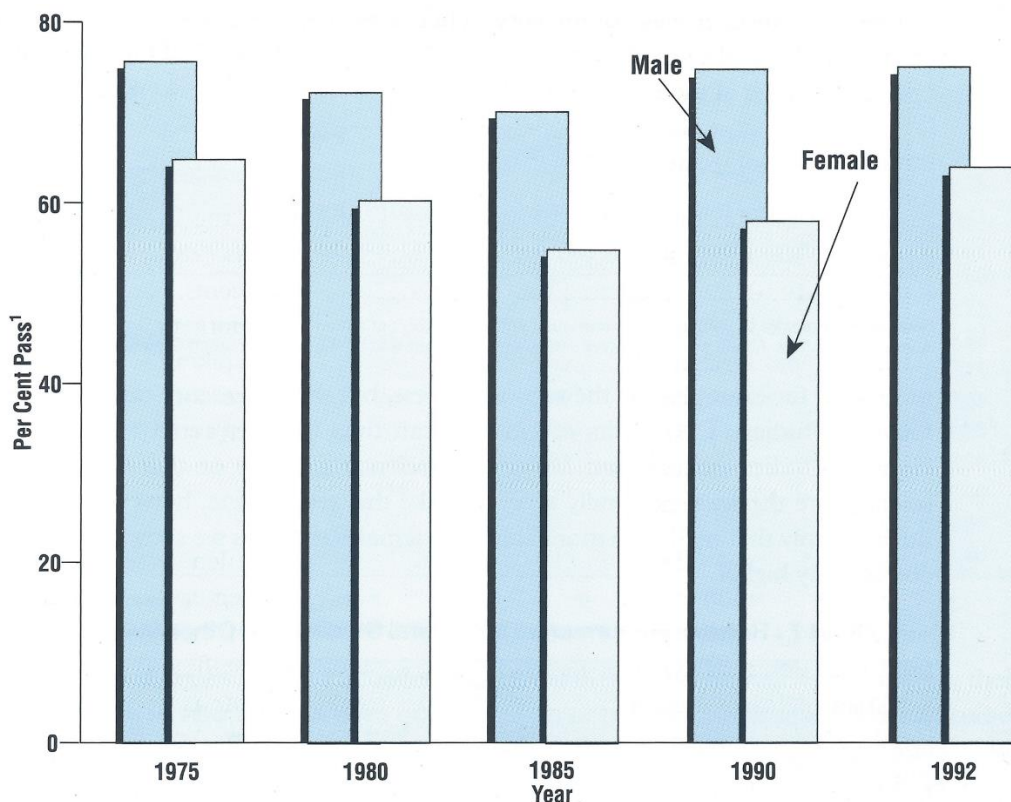
half the students in the sample expected to take the A-level examination in General Studies. For most it was compulsory. Their views, as we can see in Box A, closely resembled those of the staff and reflected what we had observed of General Studies in operation. Some of the students emphasised broadening of outlook or usefulness as an extra A-level, but it also came across strongly that students felt it was used to occupy time and was not treated seriously.

24. In commenting on the examination (in all but one school, the JMB's), the students pinpointed particular sections as difficult - foreign languages (28.5 per cent), science (25.7 per cent) and mathematical reasoning (16.3 per cent). The areas causing concern tended to reflect the student's subject combination: for those taking the sciences it was foreign languages (45.0 per cent); for those taking the arts and social sciences, it was science (41.9 per cent) and mathematical reasoning (28.0 per cent). For those taking a mixed combination the spread, perhaps not surprisingly, was more even - foreign languages (26.9 per cent), science (23.7 per cent), and mathematical reasoning (12.9 per cent).
25. General Studies is offered in many schools, and many students are entered for the A-level examination, but it is treated with widely differing degrees of seriousness from something to occupy pupils' time with staff allocated from those who are available (and who don't always turn up) to a key part of the curriculum leading to another A-level which it is hoped will count towards university entrance. The views of the pupils, similarly, range from those who regard it as a chore to those who greatly value the opportunity to broaden and deepen their experience.

## **Examination Performance**

26. The General Studies examination was introduced as a test of general ability and its constructors hoped that it would be fair across the subjects, between the sexes and that no benefit would come from specialist teaching to a detailed syllabus. Early results<sup>16</sup> suggested that this might indeed be the case. Since 1975, however, data have been available showing the respective pass rates of male and female students and it is evident, as in Chart 4, that there is a large discrepancy in favour of males. This difference has been examined in detail by the JMB who concluded it is consistent with the better performance of males in objective tests<sup>17</sup>.
27. The method of analysis used by the JMB revealed no overall difference in the performance of arts and science students, but the present study shows that there are, in fact, major differences with subject combination. Chart 5 shows that the science students, whether male or female, consistently did better, with more higher grades and fewer failures than those taking mixed A-level courses who in turn did better than those taking the arts and social sciences. Given the large part that science and maths play in the examination and the difficulty of keeping up with the sciences - which are linear and cumulative - outside science courses, it is perhaps not surprising that science students should obtain the best results. The finding is consistent with the difficulties of the non-science students as reported to us in the interviews (para. 24). Chart 5 also shows that sex and subject choice have independent effects, but since, as Chart 6 indicates, more of the boys were offering science combinations this will have contributed to the major difference between the sexes revealed in Chart 4.

**Chart 4: Performance By Sex**



1. England and Wales; includes FE.  
 Source: Annual Reports 1975 to 1992, JMB.

28. The relation between A-level subject and performance at General Studies is explored in detail in Chart 7. Those taking mathematics and sciences tended to obtain better General Studies marks than those taking the arts and social sciences, with maths and

**Chart 5: Performance in General Studies by Subject Combination, 1990**

Subject Combination <sup>1</sup>	N	% A,B <sup>2</sup>	%Fail <sup>2</sup>
Science-Maths			
Male	573	41.0	14.8
Female	268	37.3	24.6
Mixed			
Male	435	36.1	20.0
Female	333	27.6	31.8
Arts-Social Science			
Male	392	28.3	29.8
Female	664	18.4	43.8

1. Subject combinations as defined by DES (1970): Science and mathematics only, other subjects only, any combination of a non-science subject or subject(s) with subject(s) from the science-mathematics category.  
 2. Differences according to sex,  $F=44.01$ , and subject group,  $F=45.45$ , highly significant beyond 0.001; interaction between sex and subject group,  $F=1.58$ , not significant.

Source: 10% sample of JMB Entries; schools only.

the physical sciences occupying the top four places in the rank order. In their own subjects, apart from further maths at the top and religious education and sociology at the bottom, the rank order of mean performance was very different. The mean

**Chart 6: Top A-Level Combinations with General Studies, 1990**

Male (N=1789)	Female (N=1680)
Chemistry, Maths, Physics (142) <sup>1</sup>	English (N=113)
Biology, Chemistry, Physics (74)	English, History (71)
Maths, Physics (72)	Biology, Chemistry, Maths (69)
Geography (61)	History (51)
Biology, Chemistry, Maths (55)	Biology (46)

1. Ns in brackets.

**Source:** 10% sample of JMB A-level examination entries, N=7227, of whom 48.0% were taking General Studies with other A-levels of the JMB, 12.8% were taking only JMB General Studies, and 39.2% were not taking General Studies.

grade in English for example was the second highest, but those students came only ninth in General Studies. The results of Chart 7 can thus be interpreted to mean that the General Studies examination favours the science students or that those taking the sciences are the more generally able. To take this second line, however, would be to further imply that males are more able than females since, as we show, they too scored consistently higher.

**Chart 7: Relative Performance in General Studies and Other Subjects, 1990**

Subject	N	General Studies		Subject		<sup>2,3</sup> r
		Rank	Mark <sup>1</sup>	Rank	Mark <sup>1</sup>	
Further Maths	102	1	3.83	1	3.28	0.39
Maths	988	2	2.77	8	2.30	0.45
Chemistry	856	3	2.64	5	2.43	0.55
Physics	757	4	2.44	11	2.07	0.56
French	365	5	2.29	3	2.53	0.48
Biology	689	6	2.09	7	2.32	0.63
Economics	691	7	2.02	12	2.04	0.55
History	687	8	1.89	10	2.13	0.53
English	825	9	1.79	2	2.58	0.51
Geography	660	10	1.63	9	2.19	0.50
Music	68	11	1.52	4	2.41	0.52
Art	170	12	1.28	6	2.35	0.25
RE	81	12	1.28	13	2.00	0.55
Sociology	35	14	0.66	14	1.43	-0.12

1. A-levels scored 'A' = 5, 'B' = 4, ... Fail = 0

2. Correlation between performance in General Studies and that in named subject.

3. All correlation coefficients significant beyond 0.001 except art significant beyond 0.01 and sociology ns.

**Source:** 10% sample of JMB entries, candidates taking both General Studies and named subject.

29. In Chart 8 differences with subject are analysed by sex. It is clear that the discrepancy in performance in General Studies between boys and girls occurs across all subjects, apart from the very few girls taking further maths. Here the girls did better in the subject itself, as did the relatively few in physics, suggesting that even now girls have to be particularly sure of themselves to take up these traditionally male subjects. In other cases, even where the girls obtained a higher mean grade in the named subject, as in French or sociology, their performance in General Studies was still lower.

**Chart 8: Mean Grades<sup>1</sup> by Sex, 1990**

Selected Subjects	N		General Studies		Subject	
	Male	Female	Male	Female	Male	Female
Further Maths	74	28	3.80	3.93	3.19	3.54
Maths	676	312	2.82	2.66	2.28	2.35
Chemistry	537	319	2.81	2.35	2.45	2.41
Physics	596	161	2.85	2.83	2.04	2.17
French	98	267	2.67	2.15	2.34	2.60
Biology	300	289	2.34	1.91	2.45	2.22
Economics	444	247	2.26	1.58	2.15	1.86
History	301	386	2.24	1.62	2.15	2.11
English	237	588	2.39	1.54	2.57	2.58
Geography	378	282	1.80	1.40	2.14	2.25
Music	23	45	1.91	1.31	2.48	2.38
Art	56	114	1.59	1.13	2.25	2.40
RE	19	62	2.00	1.07	2.21	1.94
Sociology	14	21	1.07	0.38	1.36	1.48

1. A-levels scored 'A' = 5, 'B' = 4, ... Fail = 0.

Source: 10% sample JMB entries, candidates taking General Studies and named subject.

30. Although A-levels are the direct descendants of university entrance examinations, their usefulness in selection has been questioned on occasions. At the time General Studies was being devised there was some interest in a Test of Academic Aptitude for university entrance on the grounds that it could be more revealing than mere examination scores; and there was some hope that General Studies would be a better predictor of degree performance than the specialist A-levels<sup>18</sup>.

**Chart 9: Correlations with Degree Performance**

Subject	A Level		General Studies	
	N	<sup>1</sup> r	N	<sup>2</sup> r
Maths	208	.322***	61	.135
English	232	.228***	62	.270*
Biology	240	.354***	54	.141
Geography	182	.204**	49	-.019
Economics	334	.230***	108	.230*
French	115	.238**	30	.109
Business Studies	93	.174	29	.112

1. Correlation between A-level grade and degree class in named subject.

2. Correlation between General Studies grade and degree result.

\*\*\*significant beyond 0.001, \*\*beyond 0.01, \*beyond 0.05.

Source: Analysis of student records in ten higher education institutions.

31. We were able to test this through our analysis (see appendix, para. A1 1) of the records of ten institutions (six universities, two polytechnics and two colleges) and the results are shown in Chart 9. It is clear that General Studies is less good as a predictor than subject A-levels with only the correlations between General Studies and degrees in English and economics being significant. The correlations for the specialist A-levels were all highly significant except for business studies. The lack of relationship with degree performance of General Studies may be one reason for the admissions tutors' ambivalence.

## Acceptability to Higher Education

32. Opinions vary about the usefulness of A-level General Studies for entry to higher education. Some of the pupils and teachers we talked to saw it as something to fall back on, that a good grade in General Studies could boost overall A-level score and secure a place by counteracting poor performance in a specialist A-level subject. Others doubted whether it carried much or any weight at all, but regretted that it was not more widely accepted by higher education. The Committee of Vice Chancellors and Principals and the Standing Conference on University Entrance<sup>19</sup> have been muted in their enthusiasm, referring to General Studies as “a guide to general ability rather than as a preparation for any particular degree course”, and adding that it is unlikely to be acceptable other than as a third A-level, and perhaps only as a fourth.
33. To try to clarify the situation we carried out two separate surveys. The first used information on entry requirements extracted from current prospectuses, covering all 176 major higher education institutions in England and Wales. The second obtained information by a questionnaire survey of a representative sample of admissions tutors. A total of 59 out of the 60 tutors contacted, representing a maximum of eight subjects in each of ten institutions, agreed to participate. The subjects - English, French, mathematics, biology, electronic engineering, geography, economics and business administration - were chosen to provide a good cross-section. The survey of prospectuses was to establish the official view of General Studies for would-be entrants. The admissions tutors survey was to find out what happens in practice and how this compares with what is given in prospectuses.
34. Candidates for entry to first degree courses in England and Wales must satisfy both general and course requirements. The majority enter through the standard A-level route, which usually requires, as a minimum, passes in at least two subjects accepted or approved by the institution. In addition to this general requirement, individual faculties or departments may specify a subject or subjects relevant to the course, and may exclude certain A-levels.
35. The prospectuses provide little guidance about the acceptability of General Studies for either general or course requirements. Some institutions give lists of approved subjects, but the great majority, 90 per cent (158 out of 176), including all the polytechnics (as they were at the time of the survey in 1990), make no reference to General Studies for the general requirements. If it is mentioned, then it is usually because the institution is willing to accept it:
- A pass in General Studies, in addition to two or three A-level passes in other subjects, is regarded as a valuable qualification.*
- We are happy to accept General Studies as one of three required A-levels. Indeed, we attach great importance to a good pass because this is often an accurate indication of degree performance.*
36. Information on subject course requirements is also patchy. Out of the hundreds of departments/faculties in the 176 higher education institutions, only 84 made reference to General Studies. Of these a quarter (slightly more in the polytechnics) accepted it unconditionally. Just over half (53.4 per cent) accepted it only as a third or fourth A level, or a pass from a particular examination board was specified. The remainder (21.4 per cent) specifically excluded General Studies.

Departments/faculties willing to accept General Studies, unconditionally or otherwise, were predominantly in the non-sciences, especially arts and law.

**Box B: Attitudes of Higher Education Admissions Tutors**

**Pro-General Studies**

*If you achieve an A or a B in General Studies then you have 'a lot up top'. General Studies is more likely to show intellectual ability and the student who has done well is more likely to go off and do their own research.*

*(University, French)*

*General Studies is a better indicator of general intelligence than any other subject. It indicates that a student has a good general background. The students have to do a communication course and a course such as General Studies helps them to understand and apply themselves. It lessens the narrow restrictions of, for example, doing three sciences.*

*(Polytechnic, electronic engineering)*

*The General Studies result would be used as a compensating factor, that is, if we ask for two Cs and the student gets a C and a D, then a B in General Studies would more than compensate.*

*(Polytechnic, economics)*

**Anti-General Studies**

*It does not have sufficient academic content. It does not prepare students for a specific degree. It is too general, although we do offer degrees in combined subjects.*

*(University, English)*

*We find that it is not a rigorous discipline. It is fairly shallow. I feel that there should be a broad-based sixth-form curriculum, but the problem is that General Studies varies from school to school.*

*(University, mathematics)*

*In a word, we ignore it. We have a departmental requirement of mathematics, chemistry and biology, and my gut feeling is that if you allow it then you are diluting the quality of the student.*

*(University, biological sciences)*

*I consider General Studies to be a soft option. I exclude other subjects too, for example, Design, Food and Nutrition, Home Economics. I look for an A-level language plus one other, at least a 'C' and a 'D'.*

*(College of Higher Education, French)*

**Unknown Quantity**

*To be quite frank, there is a degree of ignorance about it, but there is a general feeling that it is too bitty, and I doubt if anybody has taken any interest in it so far.*

*(University, English)*

*Because I have never had to consider the subject I have not taken a lot of interest in it.*

*(University, mathematics)*

37. Although the great majority of the institutions seem to ignore General Studies in their prospectuses, it was clear from the admissions tutors survey that in practice the subject has some currency. In five of the ten institutions in the sample (see appendix, paras. A9 and A10), General Studies was stated to be acceptable for general entry, and nearly half the tutors (44.1 per cent) said they would consider it for course requirements. The response was more favourable from the polytechnics than the universities, but surprisingly not from the colleges.

38. Those tutors who were willing to accept General Studies said they saw it as providing evidence of a wider understanding than that provided by two or three specialist A-levels and as a good indication of a candidate's overall ability. But more tutors rejected General Studies than accepted it. As we can see in Box B, they did not think it was rigorous academically, but a "soft option", an "A-level on the cheap", and that it would dilute standards if it were given equivalence to other A-levels. They thought it was not taken seriously by schools or pupils, and that it was badly taught. It was also said by departments with far more applicants than places that there was no need to consider General Studies in addition to specialist A-levels. Seven of the 33 tutors who said they would not consider General Studies indicated that they did not know very much about it.
39. General Studies in practice is more readily acceptable than appears from the information given in prospectuses. Even so, more departments ignore it than are prepared to accept it, and there are variations between institutions and subject areas. On the whole, universities are less willing to accept General Studies than the former polytechnics, and science departments less than non-science departments. But there seems to be no clear pattern to its acceptability. The individual admissions tutor has considerable discretion and he or she may choose whether to take General Studies into account. Much depends on whether departments have many more applicants than places and are having to ration them, or whether they are having to go out and recruit.

## The Contribution of General Studies

40. Our evidence suggests General Studies as it exists is mainly a collection of specialisms rather than integrated general understanding. Although the examination is claimed to assess general ability and to be a good predictor of capacity to benefit from higher education, our analyses show that there are large discrepancies in favour of scientists and males, and there is little relation with degree performance in most subjects. It tends to be regarded as an A-level that is not quite a real A-level. It can help to secure a place in higher education but usually only as a third or fourth A-level. Some admissions tutors are dismissive:

*An unfortunate title," 'general' does not appear worthwhile. In a word, we ignore it. It is neither one thing nor the other.*

We therefore have the paradox of large numbers of students taking a qualification that appears to count for little. Although it is sometimes said that fifty thousand students a year cannot be wrong, General Studies does not seem to have been entirely successful in bringing breadth to A-level studies, and we should look at alternatives.

## Achieving Breadth

41. In principle, there would seem to be seven possible approaches for bringing more breadth to A-level courses: supporting studies, re-cast General Studies, another qualification, GNVQ units, more subjects, a baccalaureate, core skills.

### *Supporting Studies*

42. Breadth could be achieved, as it sometimes is already, through a range of unexamined supporting studies complementary to the specialist programme. However, many students treat examinations as a signal as to what is important and how they should spend their time, and there is always the danger that unexamined courses will be regarded with less seriousness than those that lead to qualifications. At the school level, the 'league tables' of exam results also serve to set goals and the omission of General Studies from the lists published in 1992 poses a threat to its future. It is likely therefore that any significant attempt to broaden education 16-19 will have to be through the examination structure

### *Re-Cast General Studies*

43. The view could be taken that the idea of breadth through an extra A-level is substantially correct but that its content should be improved. In para. 12 we suggest that General Studies as a course could conceivably be a number of things, but that, in practice, it has mainly turned out to be an opportunity to experience various specialisms. An alternative approach would be to devise a course along the lines of the interesting 'theory of knowledge' component of the International Baccalaureate, which explores the different ways we make sense of the world. This course is, however, not examined and it contributes only one of the 45 possible points in IB assessment. Another approach, as we saw in para. 15, would be a more vocational course as devised by the Cambridge Examinations Syndicate. But so far this is only a pilot, not yet accepted by SEAC, with very few candidates. Other approaches are also possible but all attempts to create General Studies as a separate subject would seem to suffer from the potential weakness of offering breadth as a bolt-on extra.

### *Another Qualification*

44. There is also the possibility of introducing more breadth through the provision of another qualification. The Certificate of Extended Studies (sometimes called E-level) currently being piloted in independent schools by NEAB to fill the gap for those seeking a non-vocational alternative to A-level is an example. The City and Guilds TechBac,<sup>20</sup> which is a qualification designed to occupy about a quarter of the timetable, is another, though this seems to have been overtaken by GNVQs. The difficulty of attempting to add breadth through another qualification is that it too could be seen as bolt-on, and further lack the advantage General Studies has of being, at least nominally, an A-level.

### *GNVQ Units*

45. It could be argued that the modules that make up GNVQs<sup>21</sup>, one of the three broad qualification pathways post-16, would be an appropriate way of accrediting studies designed to broaden A-levels. Already there are more than 50 available from the first five courses - art and design, business, health and social care, leisure and tourism, and manufacturing - with many more planned to come on stream. Combining A-levels and GNVQ units would, it is claimed, help to bridge the so-called academic-vocational divide, and make it easier for students to transfer between pathways. But replacing General Studies by GNVQ units would seem to be less advantageous for those in mainstream academic education since it would not necessarily provide them with a broader platform from which to progress to higher education. There could also be problems of coherence since GNVQs are intended to be equivalent to two A-levels so that it is unlikely that anyone taking

three A-levels, under present arrangements, would have time to do a whole GNVQ course, and a collection of units taken in addition to A-levels runs the risk of being idiosyncratic and lacking the currency of even a General Studies A-level for university entry.

### *More Subjects*

46. The need to add on breadth through special courses or units would not exist if it could be achieved through the subjects themselves. English education is almost unique in having as few as three subjects in the final year of upper-secondary schooling. The introduction of a ten-subject national curriculum makes the sharp drop to three subjects at age 16 even more of an anomaly.
47. Increasing the number of subjects normally studied at A-level to five, with some revision of content, as proposed by the Higginson Committee<sup>22</sup> in 1988, would be a way of achieving breadth that ran on student choices. Already more than a third of A-level students choose to combine the arts and sciences but across just three subjects the selection can be arbitrary and limiting<sup>23</sup>. Chemistry, French and economics, for example, does not really provide an adequate basis for progression in either the sciences or languages. With five subjects it would be possible to achieve a broader platform for progression While leaving open the opportunity to mainly specialise if that is what the student wanted.
48. A norm of five subjects at A-level would seem to have particular advantages for fields like engineering. Although an applied subject, at present it tends to recruit mainly on A-level mathematics and physics, academic subjects. With five subjects it would be reasonable to expect also technology (as advocated in *Technology at A Level*<sup>24</sup>) as evidence of a capacity for synthesis, and ability to apply knowledge, skills and understanding to practical problems. This would leave room for a foreign language, always important, but likely to become increasingly so as the European Community develops, and another subject of the student's choosing. A combination of mathematics, physics, technology plus two other subjects would be a much more secure base from which to recruit and, with technology hopefully becoming established in the national curriculum, more students could be expected to come forward.
49. The proposal for five subjects at A-level, when made by the Higginson Committee, was however rejected by the government on the contrary grounds that it might dilute the acknowledged excellence of existing A-levels and that it could prove to be too demanding for many pupils. Higginson took the view that while five subjects at A-level would involve some slimming down, rigour could be maintained. It could also be that existing A-levels would not have to be trimmed by very much if time were to be freed up from General Studies (which would no longer seem to be needed).
50. The government's preferred alternative to a five-subject A-level curriculum has been to introduce half-A-levels, Advanced Supplementary examinations. However, AS examinations have not really taken off, with only 56,368 entries in 1992 compared with 757,240 at A-level. The reluctance of schools to offer them and students to take them seems to be due to the difficulties of staffing and resources, doubts about their acceptability to higher education, and the feeling that, although intended to be half the content, two AS exams amounted to a lot more work than one A-level.

51. A norm of five subjects at the same level would create the opportunity for all students to think seriously about breadth. It would also be in tune with the new institutional arrangements post-16 where A-levels will increasingly be taken in the new Further Education sector where there is no tradition of General Studies. A five-subject norm would also make possible a combination of two or three A-levels with a whole GNVQ course thus introducing further flexibility.

### *A Baccalaureate*

52. There are some who would regard breadth as such a good thing that it should be compulsory and they would advocate not just more subjects 16-19 but a framework which specified the choices to be made. The International Baccalaureate,<sup>25</sup> which is often cited as an example, requires subjects to be chosen from six groupings at either higher or subsidiary level and includes, in addition, an extended essay, the theory of knowledge and community service. All students do two languages, mathematics, at least one experimental science, and the study of man. Breadth is specified and young people are not able to write themselves off from important subjects at an early age; but it is demanding.
53. There have been suggestions for a British Baccalaureate<sup>26</sup> which would similarly specify a spectrum of studies. A variant stresses modularisation and credit accumulation, but these are about means not ends. Unlike the other suggested approaches a baccalaureate would involve a major re-structuring of A-levels. It also raises the question of breadth across what? Earlier discussions were about the two cultures of the arts and sciences, but more recently the emphasis has shifted to bridging the academic-vocational divide. It might be difficult to arrive at a prescriptive framework which satisfied all needs. Moreover, since young people are able to choose to leave school at 16 it would seem logical that, if they decide to remain or go on to college, they should also be allowed to select what to study. Bearing in mind the extent to which young people differ in their interests and abilities, and that students are most likely to do well in subjects which they have freely chosen, it would seem desirable to have a system which prompted breadth but did not impose it.

### *Core Skills*

54. Another and somewhat different approach to breadth in education 16-19 has been the suggestion, made in a speech by Kenneth Baker in 1989 when he was Secretary of State for Education and Science and developed by the National Curriculum Council and the School Examinations and Assessment Council, that all subjects and qualifications should deliver 'core skills'<sup>27</sup>. These bodies now seem to have cooled towards the idea, but it has been taken up enthusiastically by the National Council for Vocational Qualifications. A difficulty has been agreeing a list of core skills. At one time over one hundred were identified (103 generic skills were mandatory as part of the Youth Training Scheme), but they have been reduced to six: numeracy, communication, problem-solving, information technology, a foreign language and personal skills. More recently, in view of the absurdity of trying to deliver say a foreign language through the study of maths, the focus has narrowed to the first three. Core skills are intended to be an essential element in national vocational qualifications and it is argued that they should also be part of A-levels.

55. However, while ‘core skills’ may be a useful mode of analysis, they do not seem a good way of prescribing the curriculum since they are abstractions which can only be manifested through specifying content. There is also the question of the extent to which subjects can deliver extrinsic objectives. Can English literature deliver numeracy, for example, is geography about geography or communication, and is problem-solving the same in science, history or for that matter motor vehicle maintenance? It seems better to go straight to the subjects themselves and face up to what should be included.

### *Why Breadth?*

56. There are thus a number of possible ways of introducing more breadth into education 16-19. But why seek more breadth? The present system of three A-levels is very successful in identifying people who can be educated to degree standard in just three years with relatively few drop-outs. Specialisation and study in depth 16-19 makes possible a higher education system that is efficient and effective. British graduates are in great demand in other countries, and, in contrast to our continental neighbours where the typical first degree graduate is aged 25 or more, qualify at age 21-22. It could also be, as the Crowther Committee assumed, that many young people like to specialise.
57. Even though therefore, as we indicated in para. 1, Britain (or rather England, Wales and Northern Ireland) is almost alone in the world in pursuing this path, it cannot be taken for granted that more breadth is desirable. It is necessary to be explicit about just what is being sought:
- Is it “the development of the general powers of the mind to operate in a variety of ways of thinking”?<sup>28</sup>
  - Is it to provide a range of subjects which builds on the ten-subject national curriculum and provides a broader platform for progression to higher education?
  - Is it that too many young people are giving up important subjects, like science and mathematics, too soon and we want a framework which compels them to continue?
  - Is it that we want provision for a broader span of the ability range rather than the few catered for by A-levels?
  - Is it that we think academic study puts young people off the world of work and some mixing of the academic and vocational is desirable in order to keep them in touch with the realities?
58. All of these are legitimate reasons for wanting more breadth, but they would probably be best approached in different Ways. The first could be achieved through supporting studies, continuing with General Studies or perhaps re-casting it as ‘the theory of knowledge’, or by increasing the number of subjects; the second, by increasing the number of subjects or a baccalaureate; the third, by introducing a baccalaureate or diploma which specified a range of subjects; the fourth, by developing, as is already happening, alternative qualifications like GNVQs and NVQs; and the fifth, by the mixing of A-levels and GNVQs units, or adapting

General Studies, or through some other qualification like the ‘TechBac’. It is important to decide just why more breadth would be a good thing, and what to do would follow from this.

## Conclusion

59. General Studies has been a particular approach to breadth, treating it as a separate examinable subject. It was the 1950s solution to the apparent narrowness of just three A-levels, and it may no longer be appropriate (if it ever was). By appearing to counteract undue specialisation without in fact doing so (which could also be said of AS examinations), it may be deflecting us from the hard questions of: do we want more breadth and, if so, of what kind? It is important, however, that the future of General Studies should not be settled by default: already it is being squeezed by AS examinations and GNVQs, and it was not included in the ‘league tables’ of A-level results. If General Studies is to be transformed or replaced, let it be through a rational, rather than a rhetorical, approach to breadth in education 16-19.

## Notes

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## Appendix: Methods

- A1. Our evaluation of General Studies as an A-level subject is based on: (1) considering the possible aims for teaching and examining it as a subject as expressed in the published documents and as made explicit in the syllabuses and examination papers of the examination boards and (2) by conducting three empirical studies - a survey of General Studies in operation in schools, statistical analyses of the correlates of General Studies examination performance, and a review of its acceptability to higher education.

**Table A1: General Studies A-Level Entries, 1992**

Board	N	Total	%
Northern Examinations and Assessment Board	46,296		
Other boards entering candidates via NEAB:			
- Oxford and Cambridge Schools Examinations Board	701		
- University of London Examinations Assessment Council	77		
- University of Cambridge Local Examinations Syndicate	150		
- Welsh Joint Education Committee	398		
		47,622	87.6
University of Cambridge Local Examinations Syndicate			
- main paper	3,339		
- pilot modular vocational	75		
		3,414	6.3
Associated Examining Board		1,757	3.2
University of Oxford Delegacy of Local Examinations		1,562	2.9
<b>Total</b>		<b>54,355</b>	<b>100.0</b>

Source: Inter-Board Statistics, AEB; UCES private communication for an estimate of those taking the pilot modular vocational General Studies.

### *Examination Syllabuses and Papers*

- A2. General Studies was offered as an A-level in 1992 by four boards, the Northern Examinations and Assessment Board (NEAB, formerly the IMB), the University of Oxford Delegacy of Local Examinations (U ODE), the Associated Examining Board (AEB) and the University of Cambridge Local Examinations Syndicate (UCES). The University of London Examinations and Assessment Council (ULEC) used to offer an A-level and still offers an AS examination, but like the Oxford and Cambridge Schools Examinations Board (OCEB) and the Welsh Joint Education Committee (WJEC) it now uses the NEAB paper. Table A1 shows the extent of take-up of the different papers. It is clear that the originator of General Studies, JMB/NEAB, continues to dominate the market.
- A3. On the basis that examination papers make objectives explicit, the syllabuses and papers of the five boards JMB/NEAB, UODE, AEB, UCES and ULEC were subjected to content analysis, year by year, from their inception in an attempt to tease out the aims and purposes of General Studies.

## Schools

- A4. General Studies in action was studied in the 30 schools listed in Table A2. Five local authorities, three metropolitan, one shire county and one urban/rural, were selected to provide a representative cross—section in terms of geographical location, population, economy and politics. Within each, five schools were randomly chosen according to a prescribed frame, and, in addition, one independent school was randomly chosen in

**Table A2: Schools**

School	Type	Age Range	Location	Number on Roll	Number in Sixth Form
1	Co-ed comprehensive	11-18	Suburban	1087	38
2	Co-ed comprehensive	12-18	Urban	988	67
3	Co-ed voluntary controlled selective grammar	11-18	Semi-Rural	879	246
4	Co-ed comprehensive	12-18	Suburban	1780	388
5	Co-ed comprehensive	11-18	Urban	1059	143
6	Co-ed sixth form college	16-19	Suburban	747	747
7	Co-ed comprehensive	12-18	Suburban	1519	308
8	Co-ed comprehensive	11-18	Inner City	1047	119
9	Co-ed comprehensive	11-18	Urban	1305	116
10	Co-ed comprehensive	12-18	Urban	898	9
11	Co-ed sixth form college	16-19	Inner City	743	743
12	Co-ed comprehensive	12-18	Suburban	850	119
13	Girls' voluntary-aided selective grammar	11-18	Suburban	615	167
14	Boys' independent	11-18	Urban	650	120
15	Co-ed voluntary-aided sixth form college	16-19	Inner City	898	898
16	Girls' independent	11-18	Urban	730	169
17	Co-ed comprehensive	11-18	Urban	1384	224
18	Co-ed comprehensive	11-18	Urban	1518	202
19	Co-ed voluntary-aided sixth form college	16-19	Urban	830	830
20	Co-ed community college	16-19	Inner City	332	332
21	Co-ed comprehensive	11-18	Urban	1600	249
22	Co-ed voluntary-aided comprehensive	12-18	Suburban	900	125
23	Girls' independent (boys in sixth form)	11-18	Urban	600	140
24	Co-ed comprehensive	11-18	Suburban	850	183
25	Boys' independent (girls in sixth form)	11-18	Suburban	840	253
26	Co-ed sixth form college	16-19	Suburban	454	454
27	Co-ed comprehensive	12-18	Suburban	1155	204
28	Girls comprehensive	11-18	Inner City	1043	122
29	Boys' independent	11-18	Suburban	874	207
30	Co-ed voluntary-aided sixth form college	16-19	Inner City	1121	1121

each of the geographical areas. The sample comprised 16 comprehensives (including one single-sex girls' school), seven sixth-form colleges (all mixed), two single-sex grammar schools (one for boys and one for girls), and five independent schools (two single-sex boys', two single-sex girls', one boys' school with mixed sixth form). As well as observing General Studies in operation, interviews were conducted with staff and students.

## Staff

- A5. In all, 44 staff were interviewed, as listed in Table A3. Out of the ten headteachers we talked to, eight were quite happy to discuss their views on the sixth form curriculum in general with us but delegated the rest to one or more staff - either the head of sixth form, a deputy or the teacher in charge of General Studies. The other two heads chose to handle the interview on their own. In both cases the head was responsible for and involved in teaching General Studies. In many schools the task of organising General Studies falls to the head of sixth form or a deputy head. In others a less senior member of staff is responsible, often doubling up as the head of a subject department, such as English, history or geography. In 19 out of the 30 schools one member of staff was interviewed, in eight schools, two, and in three, several. The number of staff involved was at the discretion of the head. Each interview was taped and lasted anything from one to two hours, but often the discussions continued informally during school lunch or, as on two occasions, well past the end of the school day.

**Table A3: Staff Interviews**

Headteachers	10
Deputy Heads	5
Heads of Sixth Form	9
Director of Studies	1
Teachers in Charge of General Studies	18
Head of Science	1
<b>Total</b>	<b>44</b>

- A6. A questionnaire was completed by the interviewer. It was in two parts: (1) school characteristics - numbers on roll, numbers in the sixth form, staffing, timetable, GCSEs required for sixth form study, and courses offered and (2) General Studies - its organisation, time allocated, staffing arrangements, resources, course structure and content, examination provision. Staff were asked for their views on the role and value of General Studies, its usefulness for entry to higher education, its relationship with AS-levels, and for their reactions to a broadening of the sixth form curriculum.

## Students

- A7. In each school we asked to meet a cross-section of students spread across the sciences, arts and social sciences, and mixed combinations, and in co-educational schools balanced between the sexes. The composition of the sample is shown in Table A4. Schools were only prepared to release second-year sixth formers from General Studies periods or during private study so their selection had to be left to the staff contact who had the necessary timetable details. Students were encouraged to talk freely and in confidence about their views. In addition to exploring their

**Table A4: Pupil Interviews**

Sex	Subject Group			Total
	Science-Maths	Arts and Social Sciences	Mixed	
Male	53	50	47	150
Female	36	61	53	150
Total	89	111	100	300

experience of General Studies - how much time they spent on it, how it was taught, how it related to their other subjects, what value they thought it had, they were also asked for details about their A-level choices and their impressions of the sixth form. The information was recorded on a questionnaire by the interviewer. Each interview was taped and lasted about half-an-hour.

### *JMB/NEAB Examination Entries and Performance*

- A8. National patterns for entry were compiled from Ministry of Education annual reports, Statistics of Education, annual reports of the examination boards, and Inter-Board Statistics. But a detailed study of entries and performance was made possible by the JMB which allowed us to add to a data-set originally extracted for The Growth of Mixed A-levels (Smithers and Robinson, 1988, ref. 23) of every tenth candidate in every third year (where possible). This covered the period 1951 to 1983 and was extended to 1990. The pattern of entries is shown in Table A5. For each candidate (identified in the records only by number) the following was obtained: sex, subject choices, General

**Table A5: JMB Data-Set**

Year	N	General Studies Only	General Studies in Combination	No General Studies
1961 <sup>1</sup>	2104	1.0	13.0	86.0
1964	2660	0.7	25.0	74.3
1967	3360	0.8	29.8	69.4
1970	3785	0.8	35.7	63.5
1973	4034	2.0	44.5	53.5
1976	4252	3.0	51.5	45.5
1979	4655	4.0	56.4	39.6
1981	5219	6.0	57.8	36.2
1983	5964	7.3	55.4	37.4
1985	5802	8.6	56.6	34.8
1986	5824	9.2	55.3	35.5
1990	7227	12.8	48.0	39.2

1. Data-set goes back to 1951, the year A-levels were introduced, but 1961 is the first year for which we have data following General Studies' inception in 1959.

Source: 10% sample of JMB Records.

Studies, centre (school, further education, external) and type of school (co-educational, single sex, comprehensive, grammar, sixth form college, tertiary college, secondary modern, independent). Actual examination grades were available for 1985, 1986 and 1990 enabling, for those years, statistical analysis of the correlates of performance to be undertaken. Since this was primarily a study of General Studies in the sixth form, external and further education candidates were excluded from these analyses.

### Higher Education

- A9. The acceptability of General Studies for admission to higher education was studied by collecting and scrutinising the prospectuses of 176 institutions. Ten chosen as a cross-section were studied in detail - six universities, two polytechnics and two colleges of higher education. The universities included two civics, two new campus and two former Colleges of Advanced Technology. Eight subjects - English, French, mathematics, biology, electronic engineering, geography, economics and business administration - were selected as a reasonable spread. Not all subjects were offered by each institution. Table A6 shows the distribution by type of institution. Only single honours courses were included, except for the colleges of higher education which only offered combined degrees in the subjects specified.

### Admissions Tutors

- A10. With the permission of the registrars of the institutions, admission tutors in the sixty departments shown in Table A6 were contacted directly. Only one (in a university biology department) refused to participate. A short telephone interview was

**Table A6: Higher Education Institutions**

Departments	Institutions			Total
	University	Polytechnic	College of HE	
English	4	-	2	6
French	5	1	1	7
Mathematics	6	1	1	8
Biology	6 <sup>1</sup>	1	2	9
Electronic Engineering	6	2	1	9
Geography	4	-	1	5
Economics	6	2	1	9
Business Administration	4	2	1	7
Total	41	9	10	60

1. One admissions tutor declined to be interviewed.

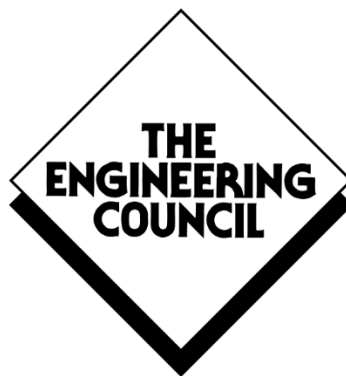
conducted, lasting about 20 minutes, covering admissions procedures, general entry and particular course requirements, and attitudes towards the General Studies as an entry of qualification.

### Examination Performance

- A11. The ten institutions were also requested to allow access to data on entry qualifications and degree performance for those who graduated in 1988. Nine of the institutions agreed to participate in this part of the study, but one college of higher education refused and was replaced. In all 55 departments allowed us access to their records providing data on 2321 students as shown in Table A7.

**Table A7: Analysis of Student Records**

Institution	Subject								Total
	English	French	Maths	Biol	Elec Eng	Geog	Econ	Bus Admin	
Universities									
1	63	38	106	36	60	89	240	-	632
2	58	30	32	49	39	32	26	-	266
3	-	18	52	37	88	-	18	57	270
4	63	15	31	40	39	39	21	-	248
5	-	-	11	2	55	-	10	34	112
6	44	25	24	49	12	39	45	-	238
Polytechnics									
7	-	-	52	40	39	-	63	98	292
8	-	39	-	-	26	-	37	38	140
Colleges of HE									
9	27	-	6	26	-	7	10	-	76
10	25	-	-	22	-	-	-	-	47
<b>Total</b>	<b>280</b>	<b>165</b>	<b>314</b>	<b>301</b>	<b>358</b>	<b>206</b>	<b>470</b>	<b>277</b>	<b>2,321</b>



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