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*The teaching of social studies in technical colleges:
with particular reference to the North East*

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CHAPTER FIVESOCIAL STUDIES IN THE NORTH-EAST: ORIGINS,
HISTORY AND LOCAL AUTHORITY POLICY

5.1 This thesis is concerned with two main things: first, to trace the development of that aspect of present technical education known variously as social, general or liberal studies, as far as classroom teaching is concerned and with regard to students not above O.N.C. level; and second, to consider what is being done in this field 'on the ground' as it were, in a representative area (the North-East), and how effective it is in attaining the objectives desired of it, whether they be those proposed by official Ministry of City and Guilds policy or those regarded as desirable by the actual authorities locally concerned. The first of these main subjects has been dealt with in Chapters 2 to 4, above: we turn now to the second, the question of how far national aims and schemes are actually reflected in the work done within the North-East area. First, therefore, I propose to examine the policies towards social studies at local authority level, and to give some account of how they came about. Chapter Six will examine the colleges themselves - or at least, such of them as include the subject in relevant courses and have been willing to furnish information on policy, teaching and organisation - and Chapter Seven will attempt to examine the effects of the subject upon the students actually being taught, and the nature and background of those students.

5.2 The North-East Area

For the purposes of this study, the North-East has been defined as an area bounded on the North by the Scots border, on the South by the River Tees, and on the West by the Pennines, thus including the administrative Counties of Northumberland and Durham and the various County Boroughs responsible for their own Further Education which form enclaves within them (the City and County of Newcastle, for these purposes, is considered an administrative County Borough). This definition has the one major disadvantage of excluding Middlesbrough, with its Constantine College: but it was felt that it would not be consistent to include Middlesbrough if one were not prepared to include also the North Riding of Yorkshire, which would involve us in dealing with an area whose character was to a very large degree dissimilar from the remainder (there are no technical colleges in North Northumberland, so that the parallel problem in that area does not arise.) Besides, the character of Middlesbrough as an industrial town is rather different from that of the towns of the Northumberland-Durham area, even those in the coastal belt, all of which show, to a greater or lesser degree, preoccupation with the problems of mechanical engineering (of machine tools as well as of shipbuilding), or of coalmining, or of both: and, incidentally, Constantine College, like Rutherford College, Newcastle, includes few if any students below H.N.C. The area as defined has, then, one major virtue: it is industrially consistent. It is an area of mechanical

engineering concerns, lying above a major coalfield. Its technological problems are concerned with machine and structural engineering, with, along the rivers, shipbuilding, and with coal. Its craft and technician students are consequently fairly consistently concerned with a group of courses, many of which have social studies as a compulsory course requirement; Mechanical Engineering Craft Practice, Mechanical Engineering Technicians Courses, Fabrication of Steelwork, Coal Mining Education, the Building Crafts (including ship joinery and ship carpentry as well as the more conventional land building courses), and the General Course in Engineering, together with a fair sprinkling of Pre-Apprenticeship courses, electrical and motor vehicle courses, and the O.N.C. and O.N.D., in which social studies is not a compulsory subject (1)

This technologically homogeneous area is administered by the following Local Education Authorities (Part III Authorities are not considered, as they have no significant powers in technical education in the area): Durham County Council, Northumberland County Council, the City and County of Newcastle upon Tyne and the County Boroughs of Gateshead, Darlington, Sunderland, South Shields and West Hartlepool. Of these Durham County has the most consistent and elaborate policy, and also the oldest history of social studies as a technical college subject, dating back to plans originally drawn up in the 'County College' period of 1945-7, and implemented from

(1): In the case of Motor Vehicle courses, it is about to become so, as a result of current City and Guilds course revisions. For a full study of course correlations between colleges, and of student numbers, see Chapter Six below.

the early 1950s: information on this was obtained from the Assistant Director (Further Education) at a talk on the subject which was given to the Regional Association of the Association for Liberal Education at Durham Technical College on 13th June, 1964 followed up by a personal interview on 10th September (as this interview was concerned largely with clarifying certain points made in the initial talk, and was informal in character, I do not propose to reproduce it in an Appendix as has been done for the more formal and prepared interview with City and Guilds: the footnotes will indicate which information comes from the talk and which from the interview). Durham is also responsible for no fewer than six technical colleges, Bishop Auckland, Consett, Durham (Framwellgate Moor); Durham City has no technical college, and has accordingly been omitted from the list of Authorities above), Easington, Hebburn and Stockton/Billingham, and is all in all a very wealthy Authority.

The other Authorities were approached by a letter, requesting information under five heads, Policy, Provision, History, Source of Policy, Aims and Objectives and Connections with National Bodies.(2). Their policies as revealed by this range from the moderately elaborate to the totally nonexistent and are all far more recent than that of Durham County: on the whole it would be fair to say that the Counties are more progressive than the County Boroughs, and the Tees more progressive than the Tyne. Like all broad generalisations,

(2): This letter is quoted in full in Appendix I, as are the replies.

this has exceptions (Darlington County Borough is one; Hebburn Technical College, which, although part of Durham Authority, is undeniably on the Tyne, is another): but it would be broadly true to say that the most progressive outlook seems to occur in the largest authorities, and in those (for some mysterious reason weighted geographically towards the southern end of the area) where there is a strong local tradition of culture and self-help, such as Darlington, with its Quaker tradition, its socially conscious dominant families such as that of Pease, and its early Mechanics Institute. Just why this southern weighting should occur it is difficult to say: there is no inherent reason why traditions of education or social responsibility should be more in the forefront in Darlington than in Newcastle where similar early interest in education existed in the Literary and Philosophical Society, with its lectures on natural science, or - except for the historical and political importance of the site - why Durham should have developed into a nexus of common and high culture, as will be remarked in the next Section, while the equally ancient monkish community of Monkwearmouth (at Sunderland) or of Jarrow on the Tyne should not. It is possible, perhaps, that as far as modern developments go the firms of the southern part of the area have been more interested in general education as distinct from training, but while it was not found possible, for reasons of time, to investigate this in detail during this research (and in any case there is a noticeable difference

between attitudes claimed by firms and those actually evinced in dealings with such matters as the release of students for internal examinations in social studies), what evidence is available seems to suggest that firms in general, throughout the area and indeed outside it, are not really interested in social studies work at all. (This question will be discussed in more detail in the next Chapter, as it affects the role of the actual teaching staff of the subject to some extent.) All one can say is, that there is an interesting mystery here, which awaits thorough research by an industrial or local sociologist. It can however be remarked that strength of political allegiance on the part of local councils does not seem to have very much to do with the matter; Durham is undeniably the most progressive authority, partly one suspects for the cultural reasons remarked above, partly because of its size and wealth, and partly because of the interest of individual officers of the Authority's staff and of its resultant appointments policy, which is detailed below and the effects of which will also be considered in the next Chapter (to some extent they are at variance with what usually obtains in educational administration, at the school level at least): but among the boroughs, Darlington seems to be more progressive, at the level we are investigating, as an Authority (though not necessarily in terms of actual College activity, though I

suspect that may be true too, as far as the comparable college is concerned) than Newcastle, although the proportions of Labour and Conservative elements on the two Councils are very similar (3). Further Gateshead, one of the most solidly Labour boroughs in the area, is one of the least progressive in this respect, despite the attractiveness of the concepts underlying liberal education programmes of this sort to left-wing thought, on which I shall have occasion to comment in several places in the next two Chapters (see the next Section and the remarks on South Shields in Chapter Six).

(3): It is difficult to assess the exact degree of college activity in Newcastle. Rutherford College is outside my terms of reference; the colleges of Commerce and of Art are equally so, though a note on the College of Art will be included in Chapter Six as a matter of interest; this leaves the College of Further Education, which was twice written to, but did not answer. The policy statements of the two Authorities, however, as will be seen in subsequent sections of this Chapter, give one the impression that Darlington as an authority is very much more conscious of its responsibilities in this field than Newcastle. The political makeup of the Councils producing these two policies is quoted below:

<u>Council</u>	<u>Total Seats</u>	<u>Labour</u>	<u>Labour %</u>	<u>Cons.</u>	<u>Cons.%</u>
<u>Before May 1965</u>					
Darlington	43	26	55	17	45
Newcastle	60	34	58	26	42
<u>After May 1965</u>					
Darlington	43	24	53	19	47
Newcastle	60	31	52	29	48

It will be seen that the composition of the councils which authorised what appear to be quite different policies is in fact politically almost uniform.

These, then, are the main characteristics of the area under study. I shall now proceed to examine the various Authorities in turn, AS a matter of convenience, the views of the local Association for Liberal Education will be discussed as a separate sub-section immediately following that dealing with Durham. It should be remembered, however, that this Association has no official Locus Standi.

5.3 Durham County Council

The interest of Durham County Authority in general and social studies in technical colleges at this level is far and away older than that of any other authority in the area. The original plans in this field date from the period 1949-51, and consequently antedate City and Guilds, Circular 323, and the Crowther Report by some years. In this particular Authority the then Assistant Director (Further Education) was an enthusiast for the extension of liberal education into technical colleges, and subsequent holders of the office have continued this policy, assisted by a particularly far-sighted Education Committee, firm in the belief that 'liberal education must take a major part in any further education programme' (4). In this they have been helped by three things: the fact that the people of the area have a traditional interest in education, and are willing to pay

(4): This information, and that immediately following, is derived from personal interview with the Assistant Director, on 10th September, 1964. The quotation is a verbatim transcript of his own comment, quoted with his permission. Other items which also come from the interview of 10th September will be numbered to refer to this note as they occur.

for it; the fact that the area, and especially Durham City, is the focal point of an established and rich regional culture, in both 'common culture' and 'high culture' senses of the term, having its roots in folk traditions, the common heritage of the mining communities, and a historical and scholarly tradition dating back to the Venerable Bede (these are interconnected: the Bishops Palatine, it should be remembered, were among the earliest and greatest of the mine owners), and there is consequently even at the present day a real desire for leisure activities and cultural life to be available to people in the area, as witness the fact that it has sponsored one of the first effective Regional Arts Associations in Britain, supported jointly by local authorities, industrial concerns, and private individuals; and the fact that the socialist nature of much of the area's politics involves the concept of the general encouragement of individual opportunities for excellence, a Russellian term which was repeatedly quoted in the course of both the interview and the Assistant Director's speech.(4)

The extent of present plans can be judged by the fact that the current (1964/65) extensions to Durham Technical College are of a scale such that they cannot as of right be sanctioned under Ministry of Education Building Bulletin No. 5, which controls the provision of amenities for technical colleges, and special sanction has had to be sought. In addition to the technical colleges, provision for liberal activities has been made throughout the area in village halls, youth clubs and community centres, and widespread schemes of adult education are run in many places.

The original impetus sprang from Ministry Pamphlet of 1947, and the first college to be constructed under the Authority's programme of 1949 ff. (Stockton-Billingham) was indeed constructed as a prototype County College, the Billingham building including community centre and public library facilities within the same precinct. Initial liberal activity began in the technical college there in 1954; this was at first largely cultural, making use of the community centre and working through the Students' Union and its related societies. It has been described as 'a voluntary effort, based on full-time students and elbow grease from the staff'. Gradually, the interest of other members of staff was aroused, at first on an informal basis and outside the curriculum. (4) In the same year, a Department of General Studies and Liberal Education was opened at Billingham, the present Assistant Director (F.E.) being the first Head of Department. The attitude of the other staff was one of vague toleration, and there was a considerable need to gain the confidence of other Heads of Department, as has been recorded in Chapter Four as happening at Hatfield. In addition, it was felt that the Department had a duty also to the student who had difficulty in obtaining qualifications (G.C.E. endorsements for O.N.C., for example): despite the fact that many liberalists might profoundly disagree, it seemed to the then Head of Department that, if the Department and its work was to be accepted either by engineering staff or

by students, 'we must be as realistic as the engineer' (5) It was for this reason that there was felt to be a need for Departments of General Studies, with Heads of Department or Lecturers responsible, on equal footing with their opposite numbers in the technical subjects, and for a consistent yet pragmatic - and not unduly metaphysical - approach to general studies work: evidence had to be produced to the rest of the technical world that the students were in fact interested and thinking, although this was not necessarily to be confused with paper qualifications, necessary as some work towards paper qualifications within Departments of General Studies might well be, from the standpoint of students and technical departments alike. For this reason there was a continuing need, from 1954 onward, to recruit general studies staff who were fully in contact with life as the students knew it: liberal men were essential, and yet the conventional 'liberal arts' man, with his school-university-teaching background was not enough. If anywhere, it is in the difficulty of recruitment which this imposes that the Authority's liberal education programme may perhaps have fallen short of its original mark (4). A consistent attempt was made, from 1954 onwards, to appoint persons having these desired characteristics (maturity, wisdom, vision, real experience of life, a genuine interest in the

(5): The preceding information, and any later information numbered to refer to this note, has been taken from the Assistant Director (Further Education)'s talk to the North-Eastern Association of the Association for Liberal Education on 13th June, 1964. Once again, the quotation is a verbatim transcript.

students, a fundamental sincerity and knowledge of purpose, and a respect for the real local culture) to such posts, first at Billingham and later elsewhere. There was, however, from the very beginning, a danger that counter-pressures to those described above were also being placed upon liberal studies staff, to be overeager in establishing the subject, and therefore lapse into insincerity. The policy of the Authority (described by the Assistant Director as 'Fabian') has therefore been to proceed at a rate appropriate to safeguarding against this as much as possible (5). By 1956, the pilot general studies department at Billingham had become well established in the more academic courses, and had also established liberal activities involving a total of twenty five societies, plus outside visits. In that year, the classroom subject of social studies, already being run experimentally elsewhere in the country, as we have seen, was introduced into the curriculum for the full-time commercial and pre-apprenticeship students (6); there was no direct connection between this pilot scheme and the City and Guilds or Ministry projects, nor with the Crowther Report: the recommendations of these were however welcomed by the Authority, and schemes were put in hand for the introduction of social studies into part-time classes, as well as for the formation of similar

(6): Durham County was one of the first Authorities to introduce Pre-Apprenticeship Courses, as early as 1947, thus antedating the Crowther Recommendations by no less than twelve years.

liberal or general studies departments (variously named) in other colleges, also working through student societies as well as through class teaching. At present, departments or lectureships exist in all the Authority's colleges. (4).

If there is any one overriding characteristic which the Authority at present believes to be essential in liberal education and general studies teaching, therefore, it is flexibility (5). There is consequently no definite policy laid down by the Authority as regards the actual teaching of the subject: what the Authority does is to encourage liberal education in general, by building programmes, by allocation of staff, and by asking the Principals of the various colleges concerned to allocate class time to general studies teaching in every course, and also to encourage college societies. For various reasons (primarily of syllabus leading) the request for class time allocations is not always met; but to attempt to ensure that it will be met wherever possible, Heads of Department or Lecturers responsible have been appointed in all the Authority's colleges (4). Thus, social or general studies teaching, as defined from the purposes of this thesis, is encouraged in as many college courses as possible, but as one component of a fairly massive liberal education programme, which also includes many society and artistic activities ranging from films to poetry-and-jazz readings involving such nationally known figures as Jon Silkin and Ken Smith, the formation of locally based Arts Societies using technical

college facilities and an impressive list of adult education classes available both in technical colleges and elsewhere, ranging from Finance to Dressmaking, and from the History of Jazz to Medieval Architecture (7). Incidentally, it is interesting to note that this same attitude of flexibility leads the Authority (or at least, the Assistant Director (F.E.)) somewhat to distrust organisations such as the Association for Liberal Education, which it fears may be too much in danger of 'getting on the tramlines' of fixed attitude (5).

Present policy within the Authority is therefore one of the active promotion of liberal education as a whole, which goes beyond the social studies period and involves much corporate work (as is also suggested, the reader will remember, in Stygall); but it is recognised that within this the social general or liberal studies period (again, variously so named) will play an important part, especially in Part-Time Day courses, where the students are less likely to be able to join in general college activities unless, as in Darlington (q.v., next Chapter), some special provision is made for them.(5). The stated objectives of this policy remind one, in places, very much of Russell's 'On Education', which the Assistant Director appears to hold in high esteem (4).

The primary objective of liberal education in the Authority is seen as 'aiming at a standard of excellence' of the

(7): Durham County Education Committee (Durham Technical College) leaflet, 'Liberal Arts and Non-Vocational Courses: Session 1963-64'. This leaflet also contains an official policy statement, and other information derived from it in this account will be numbered to refer to this note.

individual: but this aim it is stressed must always be realistic; the standard of excellence, concerned must be in those things in which the student is genuinely interested, and must make real use of the existing local culture of the Authority's area as well as the manifestations of national culture occurring within it. In its negative aspect, this aim may be regarded as being concerned with removing emotional and intellectual barriers to excellence: 'getting rid of a bit more fear - getting rid of a bit more ignorance in the world'. But the pursuit of this objective must go far beyond this: in particular, the young apprentice or student, passing from the world of school to the much larger world of industry or adult study, needs to be equipped to deal with what has been described as a 'sudden knowledge of evil'. In some cases - those of slum children, for example - this knowledge has been acquired, in part at least, at an earlier date, and now is suddenly being reinforced; but in others, it is acquired at this age for the first time, and comes (or may come) as a severe psychological and ethical shock. This is seen as being in part the fault of our current social and school education system: for its first fifteen years or so of life, the child is systematically indoctrinated with the concept that moral law is absolute in nature: the transition to work suddenly brings it into contact with the observable facts that moral law not only is not absolute, but in many areas (stealing from the firm, for instance), does not appear to operate in society at

all, or only to a limited degree, or only in some few individuals who are not infrequently derided by their fellows and are relatively low down in what in human beings corresponds to pecking order. Thus, the liberal educator has a dual, and conflicting problem forced upon him which nevertheless he must attempt to meet: on the one hand the slum child, to acquire excellence, needs to achieve a fineness of temperament which his upbringing has denied him; on the other hand the indoctrinated child needs to acquire the ability to bear reality without losing the degree of fineness which he already possesses. It is difficult to reconcile these two aims within one pattern of education; but it is impossible to say which of the two is the more important. (5) This dual aim is to be met, largely by two main procedures, neither of which however is (unfortunately) fully effective. In the first place - and this is where the social studies period is important - the student must be put in touch with good enquiring minds and values (not only, of course, that of the lecturer himself): the danger here however is that much of what is achieved in this way may be negated by home or work atmospheres. In the second place, the student must be encouraged to do things: liberal activity by the lecturer alone is of no use (indeed in one sense liberal education cannot be 'taught' at all): but the danger is here that this arousing of practical interest may fail to be organically connected to anything more basic than the interest itself. Nevertheless, these are to be regarded as the two

main methods to be adopted in pursuing the objective of excellence (4). Finally, the particular modes of individual growth which it is desired to foster are to be found stated plainly in introduction to the Durham leaflet which has already been mentioned. I cannot do better than let them speak for themselves:

'The aim of any programme of Liberal Education must be to provide ordinary men and women with opportunities for developing a maturity of outlook and judgement, for increasing their sense of responsibility and awareness, for helping them to evolve a philosophy of life, and to develop interests which will enrich their leisure. A high level of civilisation requires that as many people as possible should share in some measure in the understanding of cultural traditions and achievements.' (7)

It should be noted that these, alone of the stated aims of local authorities in the area regarding liberal education, are predominantly cultural rather than predominantly civic: other L.E.A.'s also refer to cultural aims, it is true, but as we shall see, in other places it is the civic aims which predominate, while the broader cultural objectives, which Durham stresses almost entirely, take somewhat of a back seat.

5.4 The Association for Liberal Education

Despite the structures of the Assistant Director of Education (Further Education) of Durham this Association has not

in fact declared itself to the author as having any stated aims other than the general encouragement of liberal education, by putting staff concerned with the subject in touch with each other, and holding discussions, talks and conferences. The members at Manchester also apparently carry out research surveys of various kinds, circulars for which periodically arrive at technical colleges in this and other areas. One of the more recent of these questionnaires was concerned with the relationship between liberal studies work and the more narrowly vocational courses, such as Northern Counties Technical English.

Beyond this, the Association has not furnished any more detailed statement regarding its policy in the area. However, a general idea of its attitudes can be gleaned from the comments, made by members present at the meeting at Durham Technical College on 13th June, 1964, upon the speech by the Assistant Director (F.E.) Durham, from which part of the survey of Durham County L.E.A.'s attitude (above) was taken (5). Consequently, although I would like once again to emphasise the fact that the Association has no official locus standi with the authorities in the area, I append a short discussion of it here, for reasons of convenience in cross reference to the original talk.

Broadly, the Association - or at least, those of its members present on 13th June, 1964, who were in fact delegates from most of the colleges in Durham County, plus a member

representing South Shields, and the author, deputising for the Head of Commerce at Gateshead, to whom notices of A.L.E. meetings normally come at that college - endorsed the objectives and attitudes suggested by the Assistant Director's speech. They were inclined, however, to query whether the 'dual realism' proposed as a main objective of teaching in this subject was not in fact in conflict with the servicing duties of the existing General Studies Department towards students requiring endorsement subjects, which had been historically, the point from which most of these Departments had 'taken off' as it were. The Association was aware that these duties often referred to two different groups of students, but felt that it was most important nevertheless that the person in charge of Liberal Education should be clearly seen to have personal responsibility for deciding in favour of one or the other of these aims - preferably, of course, the more general one - in cases where there was any conflict. The Assistant Director agreed with his.

The Association then turned its attention to the question of the social studies period. This historically, was the original form of liberal non-examinable work in most of the North-East colleges: but the time had come, it was felt, to expand it, both to more courses and by building round it a framework of liberal and adult activities, such as Durham proposed. Social Studies, it was felt, was a distinct subject: liberal education by contrast was not so much a subject-grouping as an attitude of mind, and it was the

attitude of mind rather than the subject which had now to be encouraged. The Association hoped that future policy in all Authorities in the area would move in the direction of providing more purely liberal activity, rather than simply more classroom teaching. But the point was also made (which will be discussed more fully in Chapter Six) that the classroom subject itself was denied facilities in many colleges: staff, rooms, and equipment were all commonly insufficient, and in one college even the library was kept permanently locked to students. It was suggested that the Association could bring pressure to bear in such cases, though, since it has no *locus standi*, it is difficult to see exactly how it proposed to do this; as to the necessity for building a larger and less formal component around the existing social studies work in the area, it is already clear that many of the aims quoted in Chapter Four cannot in fact fully be achieved in class time alone, so that this simply reflects the existing trend in national thought.

The Association then turned briefly to the discussion of methods. It was pointed out that even the classroom work involved so much material that no one member of staff could have the necessary experience to deal with all the topics involved. Unlike Stygall in this situation, the A.L.E. did not find the concept of a department staffed by a group of specialists coming to different classes for different short

courses an attractive one (this may in part be due to the fact that there is little specialist recruitment in local college departments, as we shall see in Chapter Six). Instead, they favoured the tutorial method, and an extensive use of the students' own interests, and student research. Since the object of the social studies period could be defined as 'meeting the student at his point of need', discussion techniques would also have a large part to play; but clearly such discussion must include some form of direction - it must involve 'awareness within a framework of actual study'. These three component methods (8) would therefore predominate in any actual social studies teaching scheme (5).

We may therefore deduce that, as could be expected from its members being largely recruited from within Durham County, the A.L.E. in the North-East endorses the Durham policy regarding social studies aims and provision. Otherwise, it reflects the more progressive elements of national thought on the subject, except where some local peculiarity, such as lack of specialist staffing, causes it to be necessary that that thought should be modified. Aside from acting as a clearing-house for ideas, it also seeks to act as a sort of liberal 'ginger-group' within colleges in the area: but its lack of official status makes it difficult to see how it will in fact ever achieve this. To some extent, however, it may explain the considerable unity in aims and methods which we shall find within college departments in the area, when these are examined (8): For a full analysis of methods suggested and used by different bodies and in different institutions, see the table in Chapter Six.

in Chapter Six.

5.5 Northumberland County Council

This Authority has only two technical colleges within its area of jurisdiction: Northumberland County Technical College at Ashington, and South-East Northumberland Technical College at Wallsend. Owing to a postal confusion, the original letter from the author to Newcastle City Authority was delivered to County Hall, as well as the letter proper to Northumberland: both letters were answered, and the answers, while substantially the same, do differ slightly in one or two respects. In the policy account that follows, therefore, the note (9) is intended to refer the reader to the answering letter of 18th September 1964, while the note (10) is intended to refer him to the later answer of 19th January 1965 (9) (10). Items of policy which are common to both letters will not be numbered.

The Authority, unlike Durham County, has no set policy regarding Social or Liberal studies teaching: both colleges Principals, according to the Authority, are sympathetic to liberal education, and are 'actively promoting it' (10) 'wherever... practicable' (9). 'At the County Technical College, Ashington, Social Studies in one form or another play an important part in full-time and part-time courses for apprentices, craftsmen, technicians etc.' (9 - the reader will be able to check the validity of this comment in the next

(9): Letter JW/BN of the Director of Education for Northumberland to the author, dated 18th September, 1964.

(10): Letter JW/BN of the same office to the author, dated 19th January, 1965.

Both these letters are included at Appendix I below

Chapter). Both letters refer to the recent appointment of two Assistant Lecturers in the subject at the new college at Wallsend. Both letters make the point that no special provision of buildings or equipment has yet been found necessary, although these will be provided if needed, and developments along these lines are scheduled at Wallsend, if the relevant approval is obtained from the Department of Education and Science. These are defined in letter (10) as 'an area of 1,500 square feet... included... for various work, including experimental work in this subject.' Thus, as far as actual policy and provision is concerned, we cannot really claim that the Authority has as yet very much more than an awareness of the problem and the intention to deal with it, though as we shall see, even this is more than is found at official L..E.A. level in some authorities. The questions in the author's letter regarding History, Development and connections with national movements and reports are therefore to be dismissed as irrelevant in this case (10).

The Authority does however take a considered - though somewhat contradictory - stand over the objectives which it feels ought to be attained by the subject. I say 'contradictory', because in fact the two letters quote quite different official aims: these do not, it is true, directly cut across each other, but it is perhaps rather odd that neither letter quotes the aims referred to in the other. In letter (9) they are quoted as follows:

'the Authority sees this' (i.e. social studies) 'as necessary to balance the purely vocational and technical element in a course of further education, and they regard it as their duty to ensure that young people attending Further Education courses are made aware of their rights and responsibilities as citizens and of developments in the world as a whole of which they might otherwise not have been made aware' (9)

This is the attitude (and, to a fair extent) the language of the Crowther Report and the 1962 Pamphlet: but in the later letter we find this quite different statement of aim:

'the Authority considers that the main objects of Social Studies should be to enable students to understand the economic and socialological' (sic) 'implements' (scilicet, perhaps, 'implications'?) 'of their own jobs. It is also thought that the improvement of the standard of English and communications generally should come within the purview of Social Studies.' (10)

The wording of this entire paragraph is a trifle imprecise : it is not exactly clear what is meant by 'socialological implements', nor what material other than English is intended to be subsumed in the term 'communications', and later on the paragraph refers to 'all part-time students at the College' receiving one hour's social studies per week, and full time students between two and four hours' teaching, without explaining

which college it is that is being quoted (if it is Ashington, we shall see in Chapter Six that this is simply not so). But the general attitude seems in this letter to be that of the 1956 White Paper rather than the Crowther Reports. Overall, it would look as if the earlier letter, while shorter, is more genuinely an expression of general Authority policy: if we take 'the College' as referring to Wallsend, which is in fact referred to by name in two other paragraphs, whereas Ashington is not referred to at all, the second letter would seem to have been written rather hastily, perhaps from some such document as an H.M.I.'s report on that College, which would certainly explain both the detailed specifications ('1,500 square feet') and - if the information were indeed second-hand - the probable misquotation of 'socialological implements' (11). On the basis of this conjecture, we may regard Northumberland as following current national policy (including, as in other places - South Shields for instance - what seems to be Inspectorate activity) but without any detailed direction at the local level. This is perhaps understandable, in an authority which operates only two technical colleges. Its effects will be seen in Chapter Six, when we come to compare Ashington with the Durham colleges which were prepared to let themselves be examined in detail: it may perhaps be added that 'detailed direction' is generally more characteristic of Durham

(11): Further evidence for this theory may be found in the fact that letter (9) is meticulously corrected in longhand, whereas letter (10) is not corrected at all. See Appendix I.

than of Northumberland, and hitherto, in school education, N'land's policy of devolution of detailed responsibility upon the headmasters or principals concerned has had very liberal results (e.g. at Ashington G.S.). Why technical education should seem to react differently will be discussed in the next Chapter.

5.6 The County Boroughs: Darlington

Of the County Borough Authorities in the area, Darlington is far and away the most progressive. I have already mentioned the fact that this borough has a long Quaker tradition of education and self-help: it is probably also significant that publicly organised Further Education has been a Borough responsibility since the first world war, and for twenty years before that was the joint responsibility of the Borough and Durham County (12). Thus, it is again understandable that, in the intervening period, there should have developed considerable civic pride in the status of Further Education within the Borough, and consistent civic planning for it.

The Authority's policy is set out in a letter from the Chief Education Officer to the author, dated 18th September 1964, and in the Department of Liberal and Social Studies prospectus enclosed with it. (See Appendix I). Every encouragement is

(12): letter from the Chief Education Officer, Darlington to the author, dated 27th October 1964 (see Appendix I). This figure should be compared, for example, with the Borough of Gateshead, whose charter and status are of equal antiquity, but where publicly organised Further Education appears to date back only to 1928 (information from Gateshead Technical College commemorative brochure).

given to the subject, and variety and experiment are welcomed. Facilities and staffing are good, the Department having been established on equal terms with other Departments in the College of Further Education (now renamed the College of Technology). The present facilities include a theatre, and sports and craft provision (13), and it is intended to provide an Arts Centre as part of the new extensions to the present (Cleveland Avenue) buildings (14). This is in fact very similar to the attitude evinced by Durham for example in the provisions at Billingham referred to earlier. In Darlington's case, however, the Liberal Studies policy - likewise started on the authority's initiative - dates from 1961 only, so that this similarity to the earlier 'County College' schemes should be taken as further evidence of the return to this concept of further education in the period following the Crowther Report, on a local as well as on a national level. Similar evidence, incidentally, can be found in the suggestions of the Association for Liberal Education quoted above.

In the matter of objectives, Darlington seems to stand midway between Durham and Northumberland. The liberal education provision is aimed, like that of Northumberland, at 'fitting people for citizenship' and 'tempering the emphasis on formal academic and practical achievement in technical education' (14): but, in addition, enlargement of local culture and general education are seen as important, as in Durham's policy, and to

(13): 1964-65 Liberal Studies Prospectus

(14): Letter from the Chief Education Officer, dated 18th September, 1964.

help carry this out the Department runs, like the Durham colleges, a large variety of non-vocational courses and maintains contact with the W.E.A., the Extramural Department of Durham University, and various local Arts Societies (13).

Like the other Authorities, Darlington has had no direct connection with national movements and reports, though it admits to its original initiative in introducing liberal education having been influenced by them (clearly, in particular, by Crowther and the 1961 White Paper). Like Durham rather than Northumberland, it keeps college policy under continuous review.

5.7. The County Boroughs: West Hartlepool

The remaining Authorities have very much less to say on the matter of policy than those quoted above: but one of them, West Hartlepool has, like Northumberland, what may be described as 'official intentions'. It should be noted, by the way, that the College of Further Education at West Hartlepool is itself a very new building, only the first Phase as yet having been completed, so that the existence of policy as intentions rather than active administration is once again understandable. The information which follows is taken from a letter from the Chief Education Officer to the author, dated 5th February 1965.

The teaching of social studies originated in the College in September 1960, following its introduction into various courses by the City and Guilds and the Northern Counties Technical Examinations Council. The Authority itself is neutral

in the matter: policy since then has been to develop the studies concerned as and when they became required or advised by City and Guilds and other examinations or advisory bodies, including presumably the Ministry, though no direct reference is made to this: thus the Authority has, in effect, disclaimed any intentions of local policy, but would seem to bind itself to carry out policy already made at the national level. There is, as yet, no separate liberal education provision for buildings equipment or staff, but the letter points out that fair provision exists in the college for equipment to be used for general college purposes rather than for any specific department (it will be seen from Chapter Six that no separate Department of Liberal Studies or General Studies in fact exists, the College policy being to split the team of staff working in this field between the various Departments which they service, while making it possible for one of their members to coordinate the whole. This scheme has various drawbacks - status being one of them - but the more intimate contact possible between liberal and technical staff, which stems from it, is in one sense a point in its favour). In addition, proposals are at present in hand to provide a specific Social Studies Room, in the second Phase of college building, which is currently under way.

About the objectives of this educational component, the authority is quite clear. They are, as one might expect, markedly similar to those proposed by the City and Guilds in

their course syllabuses; and they are listed and classified in a manner which makes it clear that the Authority regards its college's work in liberal education not as a frill but as as/practical an investment as its work in the technical subjects. Here again, one feels that there are advantages in this, especially as regards parity of esteem between subjects (which even in Durham is regarded as an objective rather than an attainment); but one also suspects that the practical value of these studies, pleasant as it is, to some extent a 'red herring': one at least of the virtues of a liberal education is to demonstrate that there are other values than the practical alone, important though that may be. The objectives the West Hartlepool authority proposes for this component are: better communication, broadening of the student's outlook (very City and Guilds, this, even in its terminological vagueness!), a counteractive to overspecialisation, the inculcation of the capacity for individual thought, and a knowledge of current affairs.

In sum, then, the West Hartlepool authority does not initiate: it follows honestly the official lead of the City and Guilds and other national bodies, and does this without pretending to do more and without attempting to get by on less.

5.8 The Other County Boroughs

The other County Borough authorities in the area appear to have no official policy, or to leave the policy to the

Principals of colleges. Once again, we might perhaps explain this (though it is hard to condone it entirely) on the grounds that most County Boroughs operate only one technical or other further education college, and may thus satisfactorily leave a fair amount of detailed policy to its Principal, were it not for two facts:

- (a) Darlington, and West Hartlepool both with only one college apiece, have vastly different, but clearly stated policies, even though that of West Hartlepool may in fact lean considerably upon the college principal.
- (b) of the authorities without a policy, Sunderland has two Colleges, plus a College of Art, and Newcastle has three plus a College of Art (though it may not be entirely fair to count Rutherford, as it is in a rather special position as a College of Technology with no lower grade courses).

The actual replies received from the authorities in question were as follows (all the letters quoted may be found at Appendix 1). Newcastle in a letter dated 18th February 1965 stated 'I think it would be true to say that the Education Committee have encouraged the introduction of Liberal Studies into further education courses, but the initiative in this connection comes first from the individual colleges. The Committee have been prepared to provide any necessary furniture, equipment and teaching staff as a result of the introduction of Liberal Studies'. This sounds, at first, to be at least as progressive

as West Hartlepool (and to give Newcastle its due, I must record that, in the case of Rutherford College at least, grants have been lavish, for example for the first two years of the existence of the Department of Sociology and General Studies running around £2,000 p.a. for library facilities alone): but it should be noted that there is in this reply no detailed mention of any standards to be applied other than those of the college, which may be good or bad - no mention of requirements or suggestions from City and Guilds or Ministry for example - and that the authority itself makes no mention of having any aims in mind when granting the provision.

Nevertheless, it might be possible to regard Newcastle as having a policy, or at least 'good intentions' of the kind discussed with reference to Northumberland. In the case of the other authorities, the matter is far otherwise. Sunderland, writing on 6th October 1964, is 'not clear' as to what is meant by the term 'social studies' (not perhaps surprising when one considers the bewildering changes in nomenclature chronicled in earlier Chapters!). When it is eventually decided that the enquiry refers to general and liberal studies work, the enquirer is promptly directed to get in touch with the individual colleges. Gateshead also finds the term difficult (despite the fact that Gateshead Technical College uses it as a standard form of course reference), but eventually, in a letter dated 21st September 1964, states quite clearly: 'the Authority has never expressed any views on this particular type of course and the matter is entirely within the discretion of the principal of the College'.

The Director of Education for South Shields, in a letter dated 18th September 1964, does not go so far as to disclaim any 'views' but he does state 'I think that I should be able to add very little to whatever the Principal sends you', which especially, considering the semantic loading of the word 'whatever') comes to the same thing.

All in all, therefore, we must regard these remaining authorities as possessing, in effect, no coordinated policy at all, actual or in intent. (15)

5.9 General Conclusions

Thus, as I have suggested, the situation at local authority level in the area is, essentially, that the existence of organised policy over the liberal component of technical education depends, or at any rate seems to depend, upon two things: the first, is the size and richness of the Authority, which will determine both the need for a coordinated policy and the amount it can afford to spend (and hence the extent of the policy), and the second, is the existence of a tradition of further education, or local culture, or both within the authority, which will provide the appropriate attitude towards the expenditure called for if liberal education is to be introduced on any scale. The factors determining whether or not such a tradition will exist in any given authority, at the time of writing, appear unclear. Thus, of the Counties, Durham, which is larger, richer, and older educationally and culturally than

(15): It will be noted that no mention is made of Tynemouth, Wallsend or Whitley Bay Corporation. These Boroughs in fact have no commitments in Further Education except for Tynemouth Technical and Commercial Inst. which does not run any courses of the type with which we are concerned. see Chapter Six

Northumberland, is also more progressive; of the County Boroughs, Darlington, again both ancient and comparatively wealthy, has the most progressive policy, and of the Tyneside boroughs the one that comes off best in the comparison (none come off very well, I regret to say) is Newcastle, again older and richer than the others: but it is difficult to explain just how West Hartlepool fits in to this hypothesis, unless by way of response to civic difficulties in recent years and - dare one suggest it? - 'contagion' from surrounding Durham. But why Sunderland, for instance, should not be similarly affected is something of a mystery, as has been said above. The Durham comments about a succession of personally interested A.D.E.'s (F.E.) suggest that personal interests of policy-making staff may tend to enter into the matter, and here again one would expect these to be more markedly influential in a smaller authority, where one man can more readily sway the whole. But against this must be put the fact that in other forms of education liberal attitudes in the institution tend, if anything, to correlate with lack of personal or detailed authority policy, and devolution of responsibility upon heads of institutions.

One more point remains to be made: it will be seen, in Chapter Six, that there is a close correlation between lack of a technical college liberal education policy in the authority and lack of cooperation over investigation among the individual colleges (the fact that Gateshead is an apparent exception

occurs because the author worked there until September 1965); it will similarly be seen that there is close correlation between lack of imagination in authority policy, where it exists, and lack of progressive conditions in new colleges. But it will also be found that the progressive colleges, which are again to be found in the progressive authorities, are also progressive in the same sort of way. Once again, it would seem that the key lies in the authority policy, among other things. The reader will have gathered that authority policies, where they exist, have similar basic factors, which depend of course upon the national policy decisions of the City and Guilds and the Ministry, and the nature of the subject: but he may be surprised at exactly how similar they are. The table which follows summarises these similarities, in an abbreviated form. The most striking similarities (be in staffing and in the section headed 'Aims and Objectives').

5.10: Authority Policy, by answers to circular letter:

Summary Table.

	<u>Durham</u>	<u>Northumberland</u>	<u>Darlington</u>	<u>W.Hartlepool</u>	<u>Others</u>
Introduction	wherever possible	at Principal's discretion	every encouragement	as C. & G. suggest	
Teaching	College direction	College direction	variety & expt.welcome	as laid down	
Building Prov.	extensive: beyond Ministry scale	1500 sq.ft. proposed (Wallsend)	considerable: Arts Centre proposed	proposed	

	<u>Durham</u>	<u>Northumberland</u>	<u>Darlington</u>	<u>W.Hartlepool</u>	<u>Others</u>
Equipment etc.	as needed	general coll. equipment	<u>Newcastle sympathetic.</u> <u>Others: NIL</u>
Staff	Departments	Dept.(A'ton)	Department	unofficial 'team'	
Originated in	1949-51	now (?)	1961	1960	
Developments	expansion	Nil	surveillance	as needed	
Policy Source	Authority	Nil	Authority	C. & G.	
<u>Aims & Objectives</u>					
	realism	citizenship	citizenship	current affairs	
	balance	balance	balance	broadening	
	local culture	social awareness	culture	ind.thought	
	social awareness	general edn.	general edn.	generalisation	
	general edn.	communication		communication	
	creativity	economic awareness			
	removal of fear and ignorance				
	excellence				
	transition to work				

CHAPTER SIXSOCIAL STUDIES IN THE NORTH-EAST: THE
POSITION IN THE TECHNICAL COLLEGES

6.1 In the preceding Chapters we have traced the origins and development of the subject 'social studies' in technical education, and have seen something of its development and present status within a particular region - the North-East - at the local authority policy level. But in education as in so many other things, the ultimate test of an activity is not what people say, but what they do. Consequently, it is necessary now to turn to the actual colleges themselves, and examine what is taught, how and to what students, and what facilities actually exist in terms of equipment and staff: for, among other things, the technical colleges guard very closely such independence of policy as they have been able to achieve, and even the best local authority policy will fail if the person appointed to take charge of a subject in a particular college turns out to be unsuitable, while an active and liberally minded staff can make considerable headway in the teaching of the subject at college level, even when faced with an authority lacking in interest or niggardly over equipment. In what follows, we may expect to see something of both of these situations; although the point has already been made that a progressive authority is more likely to lead to progressive college teaching, and authorities which have similar attitudes may well be found to contain colleges with similar attitudes to teaching the subject.

6.2 Investigation Procedure.

The general procedure in investigating this aspect of the subject was as follows: initially, a circular letter (quoted in Appendix 1) was sent to a group of rather more than thirty colleges and mining training centres in the area, listed in footnote (1). This initial letter asked for the following information:

1. Courses involving social studies, with numbers of students and time allocations.
2. Members of staff concerned, classified as graduate/non-graduate, full-time/part time, appointed/not appointed for English or Social Studies.

(1): Colleges initially circularised:

Technical Colleges

Bishop Auckland
 Stockton/Billingham
 Easington (Peterlee)
 Durham
 Hebburn
 Consett
 Darlington C.F.E.
 Gateshead
 South Shields Marine
 Monkwearmouth C.F.E.
 Sunderland
 West Park (Sunderland) C.F.E.
 West Hartlepool C.F.E.
 Ashington (Northumberland County)
 South East Northumberland (Wallsend)
 Municipal College of Commerce, Newcastle
 Rutherford College of Technology
 The Charles Trevelyan C.F.E., Newcastle

Mining Training Centres

Easington
 Washington Residential
 Morrison
 Usworth Colliery
 Ferryhill
 Horden
 Houghton
 West Kyo
 Kimblesworth

Other Institutions

Coll. of Art, Sunderland
 Coll. of Art, Newcastle
 County Farm Institute,
 Ponteland
 Tynemouth Tech., and
 Comm. Inst.

3. Teaching aids, use of library, use of visits. !
4. College policy, especially over aims and methods.

In addition, colleges were asked whether they would be prepared to allow the author to interview staff, and whether they would cooperate in devising some sort of objective test for assessing the work done (2).

Those colleges that did not reply were again circularised, in a letter (quoted at Appendix I) which also asked about non-City and Guilds courses. Those that still did not reply (it should be pointed out here that, for various reasons, certain replies were verbal), were written to a third time: any that did not reply at this point were now assumed not to be prepared to take part in the exercise, and were not approached again. Some institutions declared that they did not run any social studies courses, in the sense in which the term is used in this thesis: these were likewise now ignored. Of the remainder, a few were found to be working with students, or in a manner, outside the author's present terms of reference, and a few more declared that for particular reasons they were not prepared to take part (one of each of these later changed its stand on this matter). The remainder were ~~now~~written to again, and asked to specify suitable times for interview: only one in this group failed to reply. Each college was then examined in some detail 'on the spot', and finally those colleges which had indicated their interest in assisting in the attempt to (2): More stated they were willing to do this than finally took part in assessment. See Chapter Seven.

gauge the effectiveness of the subject objectively were again visited, to discover precisely what classes had been taught what material by what methods. Finally, copies of a battery of objective tests were sent out to the students in these colleges, as will be described in Chapter Seven.

The final breakdown of colleges and other institutions was as follows:

Not Replying

Bishop Auckland

Easington M.T.C. (3)

Consett

Morrison M.T.C. (3)

Ferryhill M.T.C. (3)

Houghton M.T.C. (3)

West Kyo M.T.C. (3)

Kimblesworth M.T.C. (3)

S.E. Northumberland Tech
(Wallsend)

Charles Trevelyan C.F.E.
Newcastle

Initially outside terms of
ref., but later taking part

Northumberland County Tech. Coll. Ashington (this was due to
misunderstanding)

Not prepared to take part in
the exercise

Not Offering Social Studies Courses

Usworth M.T.C.

Kirkley Hall Farm Institute,
Ponteland.

Washington Residential M.T.C.

Horden M.T.C.

Sunderland College of Art

Tynemouth Tech. & Comm. Institute,
North Shields.

Outside Terms of Reference

Sunderland

Rutherford Coll. of Tech.

Newcastle Municipal Coll. of
Commerce.

(3): The author understands that some of these M.T.C.'s may have closed since the Directory on which he based his initial questionnaire was compiled.

- (a) altogether: West Park C.F.E., Sunderland (4)
- (b) initially: South Shields Marine (5)
- (c) after first enquiries: Monkwearmouth C.F.E. (Sunderland)(6)

Prepared to take part in the exercise: Investigated

Hebburn Tech.	Stockton/Billingham Tech.
Durham Tech.	Darlington C.F.E.
Easington Tech., Peterlee	N/c College of Art
Gateshead Tech.	West Hartlepool F.C.E.

Also Investigated

Ashington (see above)	South Shields (see above)
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Total number of Colleges finally investigated: 10

In addition, material has been given to the author on certain previous work done at Wallsend by the lecturer concerned and this will be described at the appropriate point in this Chapter.

6.3 Method of Procedure

It is perhaps significant that of the ten colleges prepared to let themselves be examined on this matter six were from Durham County or other Authorities quoted in the previous Chapter as being progressive in their liberal education policy. It is perhaps even more significant that the Authority where least response was encountered was Sunderland, which it will be

(4): the reply from this college included a suggestion of a possible interview: a second letter was written, but no reply was received.

(5): When first approached, this college had no General Studies Department: contact was later made with individual staff, and when a Head of General Studies was appointed, official contact was renewed.

(6): The Principal of this college was interested, but asked for bona fide guarantees from the author. These were givenⁿ, but no further reply was obtained.

be recalled, was the Authority where the Director's office stated that it was not clear what the term 'social studies' meant. More puzzling, however, is the lack of reply from Bishop Auckland and Consett, both Durham colleges. That Wallsend did not reply is perhaps due simply to the fact that is so very new.

The material discovered during examination of these ten colleges and interviews with their staff is, furthermore, of two kinds. In the first place, there is material - relating to policy, staff relations, or attitudes - which is particular to the college and the college alone, and characterises what is singularly hard to define, but what every experienced teacher will understand - the 'feel' of that college at work, on the ground as it were. Since social or general studies seem to depend to a large extent for their effectiveness upon utilising this 'feel' in attempting to change the students' attitudes, this is clearly important. In the second place, there is material which is directly comparable between colleges; this includes such things as the types and numbers of students, the equipment used, the material taught, and the methods recommended or actually followed (not always the same thing). It is equally clearly important that in this respect the work of the various colleges should be compared and viewed as a whole.

On the basis of what has been said so far, therefore, the information discovered will be presented as follows: first,

there will be a series of paragraphs, one dealing with each college (beginning with the Durham L.E.A. colleges, and ending with a footnote on Wallsend). Next there will be a series of paragraphs dealing each with one main point in which the colleges may be compared. Finally, there will be summary tables.

6.4 The Durham Technical Colleges: Durham

Although it is not the earliest of the technical colleges within Durham County to adopt liberal education, Durham Technical College (in fact situated just outside the City Boundaries, on Framwellgate Moor) is by virtue of its position in the area and of its size and physical provision, one of the most important. There is within the College a large Department of General Studies, which also includes such things as G.C.E. work. Within this Department, functioning as a distinct sub-unit, there is a group of staff directly concerned with social and liberal studies teaching, headed by a Lecturer in Liberal Education. The liberal studies teaching in the College, as has been mentioned in Chapter Four, follows a set of self-contained local syllabuses (considerably better planned, in many places, than the suggestions of City and Guilds), which between them cover the entire range of the subject. The physical provision for courses is good, including rooms so furnished as to create a suitable atmosphere for tutorial work (which is one of the College's preferred methods - see 6.18), a wide range of teaching aids, which will be discussed in 6.16 below, and the college

hall, of which considerable use is made, though chiefly for extramural liberal activities in connection with the Durham Film Society, the Durham Arts Society, and the North-East Arts Association. All students are introduced to the use of the college library, and although the usual difficulties of time and space limit the amount of work that can be done in the library, all courses are planned so as to involve some library periods. Furthermore, the college is willing to experiment with new methods: a pilot course based on T.V. transmission and a pilot scheme of visiting lecturers for Mining Operatives were both due to be introduced in the 1964-65 session.

The College attitude to the aims and objectives of the subject is likewise clearly defined. In addition to its other functions, the College also operates a course for the Technical Teachers' Certificate, on which the lecturer in liberal education acts as lecturer in special method for liberal studies. In this connection, he has prepared a short cyclostyled pamphlet, entitled 'I Believe....', in which the main points of college policy are set out. Broadly, this regards liberal studies as being essentially concerned with the enlargement of human awareness, in all possible fields.

'The planet on which we live only has significance because of the presence of Man. History is the study of the development of man, geography is the study of man in his environment, and the vast fields of science and

technology are accounts of the constant struggle of man to come to terms with natural laws. In all types of learning Man is the key figure. Yet more and more he is diverted from the desire to study himself and those around him. Once man forgets that his life is based on and dictated by the activities of other men, intolerance, bigotry, greed and unhappiness rule civilisation.' (7).

From this, it follows that liberal education involves a great deal more than simply the classroom subject of Social Studies, important though this may be:

'... it is impossible to view Liberal Education as a 'vener of culture' for the engineer. Surely if we accept the fact that we live in an age of scientific progress it is the man who is unaware of the technical advance around him who is ignorant?' (8)

It also follows that liberal education will have the main object of enlarging the life of the student in as many different directions as possible, emotional, intellectual, moral, or aesthetic, or practical: this it is an activity which goes on all the time, and involves all the staff: the main problem in front of the liberal educator, in fact, is

(7): Stoker, 'I Believe...', Introduction, para.2. The pamphlet, which does not normally circulate outside Durham Technical College, has been included in full at Appendix IV.

(8): Ibid., 'The Place of Liberal Education in the Technical College', para.1. The use of the word 'ignorant' is interesting: for anyone domiciled for any length of time in the North-East, it carries not only its usual standard meaning, but dialect overtones of 'uncivilised', 'rude', 'uncultured'.

seen as gaining staff and student acceptance. Finally, the point is made that 'though the horizons of the syllabus should be wide, the schemes of work must be 'particular' and 'student-centred'.(9) Suggestions for schemes of work may be sought from the students themselves, and great care should be taken to fit any scheme to the age, occupation, and particular problems of the group concerned. It is highly questionable whether the objective of enlarging human awareness can ever be got from a set syllabus, particularly from an outside body: what is needed is mutual respect between teacher and student.

Because the college views liberal education in this light, examinations of any sort, the author was informed on interview, are regarded as undesirable in themselves: similarly the favourite form of period is the discussion, and lectures are not encouraged. In working out schemes of work, the discussions, and related work, are arranged centrifugally wherever possible (it will be remembered that the college syllabuses are also centrifugal in character); but it often appears that a class in which much related discussion work has been done, and whose formal 'syllabus' is not covered may have benefitted more than one which has covered all the topics set down, so that even such syllabuses as exist are not to be regarded as fixedly dominating the work done. The college incidentally, differs from most other bodies and institutions on one major point: it is not believed that English is - or should be - greatly influenced by social studies

(9): Ibid., 'The Problems of Liberal Education -2- The Students'

teaching. It is suggested that the greatest influences towards better expression during the age-range 15 to 18 come from outside the college altogether, in particular with the acquisition by the student of a 'steady' girl-friend, at which time the ability to converse and express oneself becomes a desirable part of the equipment of sexual display. This interesting concept was not found in any other college; and all other colleges appeared to inject a larger proportion of communication skills into their social or general studies work. The author, unfortunately was not able to devise an effective means of checking the suggestion objectively as regards language skills, though an analysis of the relationship between courtship and cultural span will be attempted in Chapter Seven.

All in all, then, the impression of Durham's liberal studies work was one of a college with detailed and consistently progressive ideas, where the work was perhaps more clearly 'post-Crowther' than in any other. The total number of students involved, incidentally, usually exceeded 800.

6.5 The Durham Technical Colleges: Stockton/Billingham

THIS college, as its name suggests, is in two sections, one within the Stockton borough boundary and the other outside it, at Billingham. Both are run as one College, however, and are the responsibility of Durham County. The origin of this curious arrangement appears to have been political: Durham did not want to risk losing Stockton, in the way in which they lost Darlington in 1917. As already stated, this College was

the earliest one in the authority to introduce liberal education. The work, much of which is carried out in the Stockton section, comes within the province of a Department of Liberal Studies, which has also responsibilities for general education work as explained in Chapter Five, and community activities, which are carried out at Billingham. There are altogether some 550 students involved with Social Studies, as the subject is called here, plus about 100 more studying technical English. The periods are of the unusual length (for a technical college), of 45 minutes, except in the case of an experimental G2 course, who have two hours per week (variously divided) during each week of a fortnight 'block', which is then followed by two weeks at work with no college attendance at all (10). The college buildings, in both sections, are modern and attractively designed, with good facilities for the subject, especially at Billingham, though not as outstanding as at Durham. The library, as at Durham, forms an integral part of the course, but is used less regularly. There are occasional outside lecturers, but, as in other colleges discussed in this survey,

(10): Normal technical college periods are one hour, one and a half hours, or two hours long. The hour period predominates in general studies work - usually, at the beginning or end of a half-day session - and unless it is specifically stated to the contrary it may be assumed that periods mentioned in this Chapter are of this length. It may be perhaps worth mentioning that there is considerable feeling that the hour period is unsatisfactory for social studies work, and that multiples of 45 minutes (the time used in Billingham) would be preferable, 45 minutes for lower courses and 90 minutes for the more advanced courses, project work, and block release.

few if any outside visits on specifically liberal subjects (11). Perhaps because of the division into two sections, there is slightly less feeling of corporate purpose at Billingham than there is at Durham, though the interest of the liberal studies staff and the position of the Head of Department are in no way inferior.

The college syllabus of work, unlike those of Durham, follows the City and Guilds suggestions in broad outline (this applies also for the classes - totalling some 75 students in all - whose City and Guilds syllabuses do not in fact include a social or general studies component). But these schemes are modified by official college policy, which is set down in a two-page document (reproduced in Appendix IV). The main points made by this document are as follows:

The first sheet deals with social studies. It declares that the object of the first two years of the course is to 'introduce the student to the industrial setting in which he works and the social setting in which he lives' - that is to say to make him aware of the nature of his actual environment. The second two years take the general topics of society on from this point, and deal with social organisation and social and cultural topics in a general and more philosophical way. Thus the student is led from being aware of his environment to a

(11): This peculiarity stems not from any difference of opinion in colleges from the 1962 Pamphlet or Circular 323, but simply from the fact that visits, other than to firms, present legal problems connected with industrial insurance which have yet to be satisfactorily overcome.

more critical examination of the concepts which are implied by the fact that that environment is what it is. Throughout the whole process the centrifugal method of approach is recommended. In addition, plans are made for a series of lunchtime talks and concerts as part of the social studies course, in addition to any evening cultural activities such as occur in the Billingham section.

The second sheet deals with English. Unlike Durham, Billingham feels that the English content of social studies is both important and capable of being influenced by work done within the college: this is particularly true of the first two years of the course. The methods suggested involve a good deal of oral work, and a breaking away from school discipline, and it is realised that this aspect of the course is scarcely likely to be popular, at least initially: but it is regarded as an essential part of the study, and teachers are advised to approach it through the student's needs and by the use of oral work and teaching aids, and concentric remedial work.

This document is obviously much more practical and less philosophic than 'I Believe...': this does not however necessarily make it any the worse (indeed, in terms of detailed staff guidance, it is considerably more helpful). But it is clear from the form which the study takes that its object is in fact to produce what Clarke would call the 'desired type' - defined in this case as a person aware of the nature of the society in which he lives and the forces that motivate that

society: a democratic man. Thus we find ourselves back, rather unexpectedly perhaps, at Kandel's appendix to the Spens Report. This interpretation of the document is reinforced by the Head of Department's comment made on interview: 'You can look at social studies either as adding information or attempting to change attitudes. I feel the object to be to change attitudes rather than to provide information'.

6.6 The Durham Technical Colleges: Hebburn

This college is both smaller and newer than either of the two so far discussed: it has something under 400 students involved with social studies work, including ON..C. and H.N.C. students. The college however has, as its responsible Lecturer, the first Secretary of the North-East Branch of the A.L.E., and its policy over liberal education in general is accordingly aligned very closely with the A.L.E. objectives of wide-ranging liberal activity, mentioned in the previous Chapter, for which, especially in the recreative crafts, Hebburn has become something of a byword in other colleges. These, however, are for reasons of time only carried out with Block Release students and the full-time Mining Courses: a particularly interesting feature of them is that the Liberal Studies staff have been able to obtain participation from the staff in other Departments (12), as suggested in the 1962 Pamphlet, a situation which also obtains in Darlington C.F.E., but so far as I have been able to discover nowhere else in the

(12): Liberal Studies in a Department at Hebburn; but the status of its head is that of a lecturer responsible, not a Head of Department.

Durham Technical colleges. The college facilities are again good, and use is made of the Hall for drama and similar work where possible, although student reaction to this is less than might be desired. The library forms part of all courses, and is used fairly extensively for project work, though again mainly with Block Release students. Students are encouraged to join their local Public Library.

As far as syllabuses and objectives go, the college has no set policy: Craft and Technicians courses follow the City and Guilds suggestions rather loosely, except that all second-year craft students take a Technical English course (significantly, Northern Counties English II - the most general of the four courses possible). Otherwise, schemes of work are written individually each year and approved by the Lecturer responsible, and apart from a general preference for schemes involving a good deal of discussion, but beginning from some quite concrete topic that the students can readily understand, staff are free to aim for whatever particular objectives seem suitable for their particular students. This of course implies that there is general, if unspoken, agreement between staff as to the underlying aims of the subject - as seen by the A.L.E., for example; and this in turn, one feels, is possible only because the Department is at present very much smaller than those at the other colleges. The one exception to what has been written above is the 01,02,A1,A2 group of courses, who follow a syllabus in the History of Engineering, Information Retrieval,

and the History of Philosophy and Science which is quite clearly aimed at giving them what may be called a general background to their (at this level much more articulate) engineering studies: but this is to some extent a different problem, and A1 and A2 are, strictly, outside our terms of reference in any case. Broadly speaking, then, the policy of this College is the expression of the personal liberal beliefs of the two men who form its Liberal Studies Department (possibly in such a case because there are so few of them) which are in essence those of the A.L.E.

6.7 The Durham Technical Colleges: Easington

Easington's Liberal Studies Department is the newest of all the Durham colleges, dating only from 1963, and headed by a Lecturer responsible. With one exception (College of Art, Newcastle) Easington is also the smallest of the colleges examined and certainly the smallest Technical College examined, Students taking social and liberal studies totalling only a little over 300. Like all the Durham colleges, site and buildings are good, and the equipment list, as will be seen from 6.16 and 6.20, is the best of the Durham colleges examined. This is also the only Durham college which systematically lays on liberal studies visits for full-time students. Policy over the use of the library is similar to that at Hebburn, except that instruction in its use is given by the librarian rather than a member of the Liberal Studies staff (13).

(13): Easington Technical College, which is actually at Peterlee, should not be confused with Easington Mining Training Centre, which is at Easington Colliery, some miles away.

Since the Liberal Studies Department (actually a sub-Department) had only been running for some nine months when this College was examined, it is understandable that no rigid college policy had had time to develop: but in any case it is not intended to enforce one, as it is preferred to work by agreement in the manner of Hebburn. It has however been laid down as a general principle that liberal education within the college shall be divided into two sections, social studies, which involves the type of classroom study with which we are already familiar from City and Guilds pamphlets, and which all classes take for one hour per week, and liberal studies, conceived of as a separate group of cultural and recreational activities within which the student has a choice of occupation, which is timetabled at two hours for fulltime students and one hour for part-time. It is a rather curious anomaly that in this college, in 1963/4 at least, the M.E.C.P. course was the one important group of engineering students not yet taking social studies - a situation which, according to the City and Guilds, should not be able to exist! It was intended to correct this anomaly as soon as possible however.

As regards the general aims of the subject, the lecturer responsible had prepared a brief document - for issuing with college prospectuses as much as for staff guidance - outlining what it was proposed to do in the current Session and why. Unfortunately, no spare copies of this were available, but I quote below a verbatim transcript of the relevant sections of the copy on file at the College:

'Aims

Through these varied courses students will be introduced to wider horizons of cultural and social behaviour than they could reasonably expect to meet in an exclusively technical or vocational course.

The premise that students' energies should, for limited periods in the week, be diverted away from work and study closely allied to their everyday occupations is held to be one of sound educational value, but should not conflict with the view that, for some students, a clearly defined relation between their vocational and non-vocational studies is essential if the latter are to have any meaning.

Application

The above courses of study are not at any time to be based on a rigid syllabus of work, but will be practical and informal in approach. Essentially, the students are expected to be participants, i.e., lecturing and note-taking will be discouraged, but free discussion and suggestion is to be expected from the class.

In this way it is hoped to stimulate a sense of responsibility and self-confidence often lacking in adolescents.'

Once again, then, we may sum up liberal education at this college as being 'post-Crowther', informal, based on the attitudes of the 1962 Pamphlet, and seeing the subject as

aimed at creating a responsible self-aware 'citizen type' individual, and the classroom work of social studies as existing within a wider frame of liberal activity, of which it is only part. The reader will by this time have noted that there is a good deal of similarity between all the Durham colleges on this point, despite minor local differences of weighting or approach. He is invited to compare this common ground with the explicit L.E.A. policy described in Chapter Five, which to a large extent would seem to be reflected - most probably through choice of staff rather than actual directives - in these common college policy decisions (see also 6.17).

6.8 Darlington College of Technology

This College is one of the oldest in the area, dating in its original form (joint with Durham County) from 1897. It became the responsibility of the Borough alone in 1917, as has been explained in Chapter Five, and moved into new and very well equipped premises in Cleveland Avenue in 1962. Social studies work began in 1961, in the old buildings, with evening liberal activities carried on also in a great many schools and other centres in the Borough (14), and has received the active support of the local authority in matters of staff, equipment, and departmental status ever since. Current proposals, as explained in Chapter Five, include the provision of an Arts Centre. The total number of students so far involved in social studies work was quoted by the Principal, in a letter (14): Information from the College Liberal and Social Studies prospectus, 1964/5 session.

of 20th October 1964, as approximately 750. The same letter (quoted at Appendix I) also includes the comment:

'Considerable use is made of the College library. Special classes are held in the library and instruction in the use of the library is given by the College librarian'. From the Prospectus, it can be found that other building provision includes facilities for arts, crafts and physical education. The scale of equipment, as will be seen in 6.16 and 6.20, is in fact superior to most of the Durham colleges quoted above, and Darlington is the only College in the area that systematically arranges social studies visits for both part-time and full-time students alike. The Prospectus also makes it clear that the 750 students include a fair proportion from the County authorities of Durham and Yorkshire (North Riding). Additional work undertaken by the Department includes, as at Durham, a non-vocational course for Civil Servants, in this case in a variety of liberal subjects (Durham follows a Social Studies course). There is a very strong Students Union.

The official policy of the college encourages this: in the words of the Head of Department, 'We regard participation in College life by all students, including the Part-Time Day Release classes, as every bit as important as formal teaching'. In accordance with this, many activities which in most Colleges would be held during the day - athletics meetings, for instance - are in Darlington held in the evening, so that

P.T.D. students may be able to attend. Student reaction is most encouraging. There are various Student Societies, ranging from Football to Archaeology which function in the evening in this way, and the number is constantly growing (for 1964/65 the formation of a Student Arts Society was under discussion). These are in fact derived from and integrated with a liberal studies scheme, whereby all Full-Time students devote the whole of each Wednesday afternoon to a choice of one (whole session) or two (half-session - i.e. 90 minute) optional activities, which must differ from the work they normally do as part of their curriculum, but otherwise cover the widest possible field, including crafts, arts, sports, liberal subjects and skills, and work related to the Duke of Edinburgh's award (See Appendix IV). Thus, in Darlington as in the Durham colleges, social studies itself is seen as only one part of a very much larger liberal component of the college life as a whole.

The policy over this classroom work again resembles that of the Durham colleges. The purpose of the studies as a whole is defined, in the College general syllabus discussed already in Chapter Four, in the words 'All matters concerning man's relationships with fellow men are relevant': the objective is, to arouse the awareness of the students as individual members of a society, and their awareness of their relations with it. Thus, the work is essentially student-centred. Where City and Guilds suggestions exist, they are followed as broad outlines:

in other areas, either the College Pre-Apprenticeship syllabus or the College general syllabus is followed: from these, once the teachers concerned have assessed the immediate needs and interests of each class (which occupies, on average, the first month of the Session), individual schemes of work are drawn up for each class, and are then moderated and approved by the Head of Department. There is of course no need for the teachers to worry about the more recreative aspects of liberal education, as these are already well cared for: thus the social studies course in Darlington is precisely what its name would seem to suggest - one of the few colleges where this is possible. The classroom subject (but not, of course, the liberal activities) is examined: this is not because of any special opinion of the Head of Department, but simply because a College ruling exists that all timetable subjects (as distinct from activities) must be subject to a written examination. It is fair to say, however, that past examinations have been both unconventional and rewarding in real information about the students: one set, for example, included throughout objective tests of cultural span similar to (but less comprehensive than) those we shall be discussing in Chapter Seven.

In general, then, we may group Darlington along with the Durham colleges in progressive outlook. If anything, it is even better organised.

6.9 West Hartlepool College of Further Education

This, as has already been remarked, is a very new college,

at least as far as buildings go; it does not as yet include a Department of Liberal Studies (the exact arrangements over staffing will be described in 6.17 below), and present social studies work in the building is coordinated by a member of the Engineering Department. Understandably, the scale of equipment is less good than that of colleges in which the subject is better established, but all students (totalling almost 1000) are introduced to library work, and deficiencies in the scale of equipment are to some extent offset by regular visits with the students to the Public Library, which is quite close to the College. In the matter of liberal activities other than social studies, facilities appear at present largely to be restricted to sport, although the Commerce Department students do have their own social club: there was originally a Students' Union which catered for cultural and recreative activities, but the students asked to be allowed to take over its entire running, before they were really ready to do so, and it unfortunately 'died' about six months later (this difficulty, related to the grade of students and the lack of full-time attendance, is one which tends to dog Technical Colleges in many places - hence the high degree of staff supervision of Union activities where these are successful, which will be noted in 6.17). It is intended to revive the Union however, under staff guidance, as soon as the building programme and other circumstances make it possible to do so effectively.

As far as the social studies aspect of the work goes, the prevailing circumstances make it plain that there can be no systematic policy at the college level, apart from the general college rule that all pupils must attend, take the course seriously, complete the same specified numbers of homeworks as are required in other subjects (the member of staff co-ordinating the subject believes - one suspects rightly - that this ruling is unsuitable for social studies, and would like to see it changed, if possible) and pass the relevant examinations. This last clause in practice means Northern Counties Technical English examinations, as the college does not examine social studies as such, but has an arrangement with City and Guilds whereby all classes divide their liberal studies time between Social Studies and English, and take the appropriate Northern Counties examinations, social studies being the subject of a Principal's report only. As has been stated by the Authority, the City and Guilds material is used as a general guidance line over material to be studied, but selected classes (usually full-time or block release in character) take additional historical or cultural subjects, which will be discussed more fully in 6.19 below. Projects and similar methods are widely used, in particular in the higher classes. The detailed objectives of the social studies work, partly because of the administrative set-up, are left largely to the individual staff concerned, but most of the staff concerned are

agreed on the main objectives of the courses being to encourage an awareness in the students of their civic responsibilities, together with the development of some degree of independent thought.

Thus, we see in this college an attitude among staff broadly similar to that at Hebburn: but the college policies are of course much less well-developed, due particularly to the newness of the building and the less explicit policy of the local authority.

6.10 Northumberland County Technical College, Ashington

With this college, we come to a group of institutions markedly different from those discussed so far, in which policy regarding social studies teaching has been much less explicitly worked out. At Ashington, the college policy is to regard liberal studies primarily as taking place outside normal College hours. The Head of Department up until Easter, 1965 (the post is at present vacant) did not agree with this policy, and was of the opinion that liberal studies should be well taught by well-qualified staff, as an integral part of all syllabus ^{es} but was not able to carry out this policy, partly because of lack of available time in the syllabuses concerned, and partly because of lack of staff: two vacancies on establishment for liberal studies staff stood unfilled throughout the 1963-64 session. The official college line is that students take a course of industrial and social history, delivered rather

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formally: but there are two exceptions to this. Full-time courses in the engineering department have facilities for games and P.E. as well as English, while O.N.D. students are brought back on one evening a week to study from a list of liberal subjects: unfortunately however, this tends in practice to be restricted to the study of one additional G.C.E. subject, and is thus taught in a formal rather than a liberal manner. The other exception is the Building Crafts students (a considerable block), who do indeed follow the City and Guilds general studies syllabus: but these are outside the provenance of the General Studies Department, whose work has been described by the Head of Department as 'not by any means logically or exclusively administering the general studies component, and also concerned with many other tasks, including mathematics, science and adult evening classes.' In 1963/4 one liberal studies course was nevertheless able to 'get off the ground', with full-time G2 students; it was concerned with the benefits of citizenship, and had a highly practical slant. Unfortunately however the course folded at the end of that session, because of the continuing staff shortage. The college does however give instruction to all students (some 850) in the use of the library, and one good feature of it is that a Tutor Librarian has been appointed, to allow work to be done by students actually in the Library. The scale of equipment is also very good (though considering the staff shortage one wonders how much of it is actually used for purposes relevant to this thesis).

To some degree then, Ashington College policy may be described as having fallen into the trap (of trying to mix examination servicing with general studies) described by the A.D.E. (F.E.) Durham in the talk discussed in Chapter Five. Despite this, however, it should be stressed that evening activities flourish, largely because the college possesses a very strong Students' Union, and there is general staff participation in these. It should also be mentioned that about 120 students are involved in a Wednesday afternoon scheme of six-week film appreciation courses: these are all full-time or block release students. On the whole, however, the atmosphere within the college as far as social studies is concerned does not seem to be a very happy one, and one may reasonably question, on this basis, the effectiveness of the 'good intentions' which as was pointed out in Chapter Five is the most apt description of Northumberland's declared policy.

6.11 South Shields Marine and Technical College

Social Studies in this college again presents a different sight from social studies in those that have gone before, but in this case for rather different reasons. The college is of course an old-established and well-known institution (recently moved, like so many colleges, into new buildings), and its Marine Engineering courses are justly famous. It will however be recalled that South Shields is one of the authorities that have no social studies or general studies policy. Accordingly what seems to have happened is this: initially,

there was no General Studies Department, but, when the movement towards liberal education began to get under way, and especially following its inclusion in a number of C. & G. courses and the publication of the Ministry Pamphlet of 1962, social studies work was taken up by a number of interested individuals in the College. Some interesting work, which will be discussed in a moment, was done during this period. Meanwhile, pressure was growing, apparently from H.M.I.'s, for social studies to be included in all courses, and a Department of Liberal Studies to be created (See also 3.2, 3.12, 4.17, 5.5(above), and 6.17(below)). This was finally done, in September, 1964, and with the appointment of the first Head of Department. Certain broad aims were then laid down for the new Department, and the past Session has been spent largely in organisation. Figures on the number of students involved are as yet incomplete - the Department's courses are still growing - but they had risen by late 1964 from approximately 140 during the earlier period to at least 750. What follows must necessarily therefore be a progress report rather than a complete survey, but it seems probable that eventually a situation will obtain at South Shields rather similar to that obtaining at Darlington. At present, however, matters are in a state of some considerable flux. In addition, it is not fair to comment in this account on facilities and equipment (although these will be discussed in 6.16 below), since for the same reason these are at present matters of intention rather than of fact.

As to the position before 1964/5, one of the staff who undertook the initial work was kind enough to provide a written statement: I cannot do better by way of describing the college set-up during this early, unorganised period, than quote the relevant material from it. It has not been included in the Appendices, since any information not quoted here is simply numerical material which will be found in the summary tables at 6.20.

'The only department that specifically offered Social Studies' (in 1963/4) 'was the Apts, Crafts and Catering Department, dealing with Pre-Nursing Students, Pre-Nautical Catering and Nursing Cadets... In addition certain heads of other departments used the Commerce Department or their own lecturers to take English or Liberal Studies but as yet there existed little coordination or planning, hence the setting up of the new Liberal Studies Department' (this department is the one which came into existence in September, 1964). 'Many of the prestige courses (Cadets for M.N. Mech. Eng.) got little or no tuition. There were approximately six members of staff involved, and in certain instances people appointed to do such subjects as Geography took Social or Liberal Studies. The College was well equipped with projectors etc; our department did a great deal of visits though they were mainly career orientated (e.g. public health facilities, ships, factories)... In addition to the Commerce Department we did have a Music organiser (15) who took classes from all departments (15): This member of staff left in 1964. The post had not been filled at the time of writing - author.

but his classes depended upon the attitudes of these departments with the result that Mechanical Engineers (I think) sent none, Electrical Department gave some more advanced students as well as pre-apprentices the choice of Art or Music, in addition to spasmodic social studies...' The member of staff concerned then described the social studies work he and his fellows were currently engaged on in these terms:

' ... At present I am finding out what goes and stimulates rather than following an ordered pattern. My departmental work allows a fair amount of career orientation in Social Studies periods, e.g. National Health Services. Next year (16) a more ordered arrangement will be organised. I like to make a distinction between Liberal and Social Studies for teaching purposes; Liberal education in the broad sense I believe should be tackled by the College and Students' Union in providing extra-curricular facilities in which the students can participate: e.g. I plug the Film Society which holds meetings in our building. Social Studies I believe will always handle certain basic topics - variety comes in finding the right approach to suit the aptitude and interest of the student concerned. Subjects which I have found particularly satisfying to teach and which have been enthusiastically (sc. received by) 'or at least moderately acceptable to the students are:

(16): At present - 1963/4. Next year - 1964/5. See above.

1. Education (Historical aspects, present structure, implications of developments, e.g. comprehensives (17))
2. Advertising
3. Teenage Income and Expenditure (18)
4. Social Services
5. Systems of Taxation, Insurance, Banking.

Besides these topics, I try and allow the students to introduce subjects of their own choice - most successful areas have been racial prejudice (19), treatment of juvenile offenders, and most of the other Social Studies chestnuts. A general conclusion seems to be that syllabuses will usually contain similar topics just as Liberal/Social Studies textbooks (20) tend to be pretty uniform in content - the key is approach.' (21).

From this statement, the following points about attitudes to social studies at South Shields before the formation of the Department - at least as far as concerns the group of unofficial workers in the field for which the writer of this account was acting as spokesman - may be gathered.

(17): This should not be taken as being generally true: by contrast, one of the staff involved in social studies work at another college told the author: 'When it comes to new developments in education, such as the comprehensive schools, even the technicians just don't want to know.'

(18): Cp. Stygall et.al., 'Liberal Studies - 1 -' See Chapter Four above.

(19): This topic was also quoted as an example at Durham in 'I Believe...'

(20): The reference here is to the class textbooks, not, as far as I understand, to sourcebooks such as Stygall.

(21): The truth of this last statement is amply demonstrated by the comparative analyses of material in Chapter Four and at 6.20 below.

In the first place, Social Studies and Liberal Studies are not the same thing: Liberal Studies is extracurricular and involves choice (22); Social Studies is essentially curricular: it is concerned with the place of the student and his work in society (23). In the second place, the subject seems to have three aims: to enlarge the student's awareness of the society around him; and to arouse his interest in things outside his own technology; and to render the student aware of his career possibilities, and of his place in an industry or profession. This last aim, incidentally, is not found in any of the general literature on the subject, and seems to be rather narrower in scope than those we have come to regard as usual: for all that however it may well be more practical, with the lower-grade student in particular. In the third place, emphasis is placed on the correct method being applied for the type of student being dealt with, so as to arouse the maximum degree of interest. This is what is to be regarded as the starting point for the work of the formal department in the subject.

To these points may be added a personal statement of attitudes made verbally by the members of staff who operated this original scheme, at a meeting in June 1964: they felt expression work and 'arts' work to be largely irrelevant except in their subsidiary aspects, and they also felt the larger aim of 'Education for Citizenship' suggested by the third aim

(22): As at Darlington. Stygall differs, incidentally.

(23): Stygall concurs.

stated above to be rather too vague and woolly, and also somewhat pompous: the prime objective of the subject was 'to render the student able to understand and criticise his society constructively: to promote minds capable of pursuing social change'. (24)

The information on the alterations following the appointment of the Head of the new Department of Liberal Studies in 1964 was obtained by interview from the Head of Department. Obviously, much of what he had to say was to be regarded as highly provisional, and most of it was a statement of intent rather than policy, as he had only just taken up duty when he was interviewed. The links with college and borough societies were to continue, it appeared: to the existing equipment available further equipment and facilities were to be added, on the same scale as Darlington and the Durham Technical colleges. Social studies teaching was to be expanded to include a large mechanical engineering component in the college, which, it will be remembered, had not been dealt with before. At Inspectorate request, College rather than C. & G. syllabi would be worked.

(24): It is interesting to note, throughout these investigations, how much more 'left-wing' the aims of individuals interested in the subject, whether as theorists or as teachers, are than the aims of official bodies concerned with it. It is almost as if officialdom had, around 1956, jumped on a leftward moving bandwagon with the object of applying a slight braking force. This is an excellent example of the difference of attitude involved: it should be compared with the City and Guilds reply (in which they valued 'tolerance' rather than 'criticism' or 'social change') to the very same question, put in the policy interview quoted in Chapter Four and at Appendix II.

Little more could be said at so early a date, except that further experiments were under way: the Head of Department did however lay down two general aims of the subject which he intended his staff to pursue, rather wider than those discussed above: the 'awakening of a critical attitude to social problems generally: not a corpus of knowledge', and - quite new, for South Shields - the improvement of verbal communication.

The interest of South Shields for the reader, then, is in how it is changing rather than what it is doing. In effect, what has been described here is a college in the process of working out the sort of policy which in the case of Darlington or the Durham college has already become accepted fact. The reader should note the individual and institutionalising influences at work, and not least the role played by Her Majesty's Inspectors, who have several times been mentioned. It is also interesting, because it reflects on a local scale (and rather later than usual) the processes which we much imagine to have been taking place on the national level during the period 1952 to 1959, as described in Chapter Three. It also adds evidence to the thesis that the speed of development has been greatest at the southern end of our area, for reasons perhaps connected with local culture and civic history rather than party politics, despite the apparently 'left-wing' tendencies of the subject: South Shields, like Gateshead, is a solid Labour seat.

6.12 Gateshead Technical College

The last technical college to be described in detail again presents an odd picture from the point of view of liberal studies. Culturally, all the factors we have so far uncovered are working against it. Gateshead is a Tyneside borough - i.e. towards the Northern end of our area. It is a poor authority: on at least three occasions in recent years its rate equalisation grants have been the highest per capita in England and Wales. The Local Education Authority has no declared policy over social studies. The College dates as an institution (though not of Technical College status) only from the late 1920s, and as a technical college proper only from World War II. The buildings are at present incomplete, the final Phase of the college, which includes the hall and Students' Union facilities, only now (1965) being under preliminary construction.

To these cultural and civic difficulties may be added further ones within the college, mainly springing from current staffing difficulties. From 1962 until May, 1965 the College was unable to obtain a permanent librarian, and as a result the library had to be kept locked, to staff (unless accompanied by office staff) as well as to students -though a small amount of use was made of it for teaching purposes in the session 1962/3. The reduction of liberal activities springing from this was accentuated by the fact that throughout the same

period it was not possible to run a satisfactory Students Union, partly through lack of buildings and partly because of the small number of full-time students (this difficulty, as has been stated, occurs frequently in Technical Colleges) and that specific aids and equipment for social studies as such did not exist, the college equipment being shared with other departments, as at West Hartlepool, but apparently being much more difficult to obtain. The liberal education staff were also throughout this time in an anomalous administrative position, being part of the Commerce Department for administrative purposes, but servicing the other Departments, and were also heavily loaded with G.C.E. and other formal commitments: in addition college regulations regarding homeworks and examinations were in existence (as at Darlington) and these continuously tended to pull the subject in the direction of formal lecturing (all examination papers set in the subject for example, had to be checked for conformity to the wording of the City and Guilds suggested topics). This college has also been unfortunate in being more than usually dependent for liberal studies work on part-time staff (especially married women) so that continuity between classes has been made more difficult than in other places: this has been accentuated by the fact that timetabling is arranged (understandably) to give preference to continuity in the technical subjects rather than in liberal education, and some classes have been known to have four or five different

lecturers in the same session, these changes sometimes taking place at highly inconvenient times - the fifth week of the Autumn term, for example, or four weeks before the end of the session. (It should be noted that this kind of timetabling confusion was very much the exception in other colleges examined). These difficulties have tended to make the students themselves disillusioned about the work they are doing.

In the face of these difficulties, and since the official policy within the sub-department has been that courses should conform as literally as possible to the City and Guilds syllabus suggestions (or in their absence to Ministry Circular 323) and that teaching should take the form largely of formal lecturing and the teaching of English, with research and projects playing a limited role, mainly in the higher grade classes, it would not be surprising to learn that little 'post-Crowther' work has been done at Gateshead. Yet it is, strange as it may seem, in Gateshead that the largest variety of methods and experiments in the actual classroom subject and the material taught seem to obtain (see 6.20): a total of ^a little under eight hundred students are involved, and as well as the more formal 'topics', classroom work has included, in the past two sessions, courses in Information Retrieval (technicians), Clear Thinking (technicians), Musical Appreciation (craft, technicians and H.N.D.: this includes student participation, by no means restricted only to 'beat' music), several courses

on Advertising, the Geography of Hunger (craft), and projects on The History of Invention (craft and technicians), old and new housing schemes and their effect on our way of life (Fab. of Steel), planning and booking a holiday (various courses), and house purchase and fitting out (technicians), and a survey of Gateshead Borough (craft). Members of staff also encourage students to join, and work in, their local libraries, and last session one very small class managed two unofficial visits, one to the Central Library and another to the Shipley Art Gallery. The methods of approach used with students are similarly diverse. (see 6.18).

The reasons for this apparent paradox are fairly easily stated. The liberal studies staff includes a group of full-time members who happen to be highly interested in this type of work, and the anomalous status of the group as a whole means in effect, that official policy about teaching methods, or the nature of courses (other than those concerned with examinations) is only lightly enforced. Hence, in practice, staff tend to arrange among themselves what subjects or methods they will adopt, always of course within the limitations mentioned above. The lack of extracurricular activities within the college has led staff to broaden the scope of their classroom schemes of work wherever students have shown interests or capabilities which needed meeting, and the lack of easily available equipment (25) and outside assistance has similarly forced them to devise

(25): A television set has however been available since early 1965, which is more easily available than other equipment. Use has been made of this.

ingenious methods of arousing the students' interest and getting them to work at and help present the subject, which has resulted in the establishment of something very like an unofficial tradition of student research. (One member of staff commented to me: 'the object of teaching social studies is to get the students to do the work'.) Opinions among staff are divided as to the exact importance of the general aims of leading the student to observe his society, leading him to think critically about it, leading him to be able to communicate, and leading him to an enhanced awareness of what there is about life to enjoy, but most of the group referred to regard these, or most of them, as the main objectives. The official statements of the college attitudes over aims is 'giving knowledge of the practical importance of their understanding industry and the society outside' - an aim which we have seen occurring in the literature particularly during what has been called the 'political' period; but general staff feeling appears to go considerably beyond this, and is more 'post-Crowther'.

Thus, potentially, we have in Gateshead the same sort of situation as in South Shields prior to September 1964: an interested and active group of individual members of staff. It is not likely, however, that any similar development from this position will take place at Gateshead for the following reasons:

1. There is still a lack of coordination of this work, partly due to staffing difficulties (i.e. part-timers).

This means that there is no feed-back of experience gained by individual members of staff into the college system as a whole.

2. Restrictions on equipment, visits, liberal activities and such like appear liable to continue at least at present, so that the work already done, will probably remain simply a struggle to compensate for unfavourable conditions of presentation, rather than 'get off the ground' into anything more elaborate.
3. There is no formal Department to cater for the work, and none appears to be likely to be set up in the immediate future. Thus the present administrative difficulties will presumably continue, and with them, the examination subject commitments on liberal studies staff which have already been referred to.
4. Under these circumstances, the most active members of staff tend to become discouraged, and there is a strong tendency for staff either to leave or to move out into other Departments.

6.13 A Note on Wallsend (South-East Northumberland Technical College)

As has already been explained, South-East Northumberland Technical College, possibly because of its newness, elected not to reply to any correspondence on the subject of social studies work; all that the author was able to discover therefore was that there were two full-time assistant lecturers

appointed for the subject (26) and that the courses operated concerned mainly craftsmen and operatives (27). However, the author has been supplied by a previous lecturer at the College with a copy of a scheme for Social Studies teaching with Mechanical Engineering Craft Practice students operated shortly after the College's inception. The author has not been able to discover whether this particular scheme is still being operated, but as an example of the sort of work which has been done elsewhere in the area than in the colleges which were prepared to let themselves be examined, it is of some interest, and since it was committed to paper in a formal cyclostyled note it - or something like it - may well still be in operation. The entire scheme is appended, with comments, at Appendix IV: it has been used by its author as part of a lecture course on general studies in Technical Education and published to students attending the course.

6.14. A Note on Newcastle College of Art

It will be recalled that, in the initial stages of the investigation into North East colleges, a number of institutions within the area which were not actually technical colleges, but were of approximately the same level in further education, were written to. The object of this was to discover how widespread the teaching of liberal subjects was in general. Reference to Paragraph 6.2 will show that in fact the vast

(26): Letters JW/BN from the Director of Education for Northumberland to the author, dated 18th September 1964 and 19th January, 1965 respectively. See Appendix I.

(27): Information supplied verbally by the Asst. Lecturer in English at Wallsend.

majority of these institutions did not in fact operate any courses of this nature. The one exception to this, however, was the College of Art and Industrial Design, Newcastle, and since the other colleges in Newcastle did not reply or are outside the terms of reference of this thesis, it is perhaps of some interest, both as an example of what is being done in the city and as an example of a similar type of course being operated with non-technical students of a comparable range of levels, briefly to describe the work that is being done there. The college will also be included in the comparative section and summary tables that follow.

The main buildings of the College of Art are now in Jesmond, but some departments still use the old buildings in Ellison Place, near the new Rutherford College building. There are three main courses run: the Diploma and Pre-Diploma courses, which are equivalent in status to the Dip. Techn and the O.N.D. respectively and are therefore virtually outside the scope of this thesis, and the College Diploma course, a three-year course with entry at sixteen, for which no formal examination qualifications are required, and with a feeder Preliminary course of one year (15-16 age group, comparable with the Pre-Apprenticeship courses in technical education). The main subjects for these courses are Industrial Design, Fashion and Commercial Design, but all students on these two courses also take what are described by the College as 'Complementary Studies'. These occupy nine hours per week

during the Preliminary year and five and a half hours/week (reducing to four and a half in later years) in the College Diploma course proper. It should be pointed out, incidentally, that all students in these courses are full time, and probably of a higher level of creativity and general intellectual span than many of the equivalent technical college students, despite the fact that no formal examination requirements for entry exist.

These 'Complementary Studies', for the Preliminary year, are further split into Liberal Studies, English Studies, General Science (more necessary than in other colleges, since the students are non-technical), and Art Appreciation, thus together forming a general extension of education. The syllabuses were discussed in Chapter Four, but one or two additional facts should be pointed out here.

Liberal Studies includes current affairs, films on modern society, and projects involving social contact, music, visits, questionnaires, visual presentation, interviews, political discussion etc. Sample topics during the 1963/4 session included The Theatre in Newcastle, Air and Water Pollution and Medieval Architecture. A lot of time during this year is also devoted to the English Studies component, which is why the total time allocation is so large, and this involves much discussion work, plus reports on books, films, and similar language media. Although the work is intensive,

no formal work is undertaken, as a matter of college policy. The General Science course, which is still in its early stages, places a special emphasis (corresponding to the industrial topics in technical college social studies) on the relationship between scientific developments and social life.

For the Diploma Course proper the arrangement is slightly different. The subject is divided into Formal Study and Art Appreciation, which includes films, lectures, debates and visits. This occupies two hours per week. The remaining two and a half hours are given to Formal Study, which is then 'set' into three groups. The students are likewise divided into three groups, and are rotated from subject group to subject group so that over any three week period, week one is spent by each group on subject group one, and weeks two and three are divided up with one and a quarter hours devoted to subject group two and one and a quarter hours to subject group three in each week. The arrangement of subject groups is as follows:

Year 1

Group 1...Environmental Social Study (individual and
group projects)

Group 2...English Usage and Criticism (similar to the
Prelim.)

Group 3...Current Affairs

Year 2

Group 1...English: modern literature and drama
(playreading etc.)

Group 2...Philosophy and Psychology: Introduction (incl. visits)

Group 3...Social Problems in contemporary Britain (projects)

Year 3

This year of the course was due to start in 1965/66: subjects to be included were ethics, literature, music, film making. The groups had not been decided when the investigation was carried out.

The staff, which forms a separate Department, headed by a Lecturer, enjoys general help from other departments, especially in the Art Appreciation courses. The schedule of equipment available is very good (as one might expect in such a college), and all students are introduced to library work. Particular use is made of the film as a teaching aid. There is no Students Union, but there are various college societies (see 6.16 below).

It will be seen that, although this institution is not a technical college, and some of the subjects included are of a considerable degree of sophistication, that the general pattern of studies (influenced undoubtedly by the Crowther Report, which covered all further education, and not merely that in technical colleges) is very similar to the sort of thing suggested in the 1962 Ministry Pamphlet. The same is true of the college conception of the objectives of these studies, which was summed up by the lecturer responsible for the famous Latin tag 'homo sum: nihil humanum me alienum esse puto.' The general objective of these courses, he felt, was

therefore to make the students as fully human as possible by broadening their awareness of life in all its aspects. Similarly the methods preferred - projects for social studies work proper, discussions and reports for English, and outside lecturers and visits for the other material, are very similar to those found in the better technical colleges in the area. Thus we may conclude that the subjects, aims and methods of the study do in fact, as was suggested when discussing Garforth derive from the study itself rather than from the kind of student or college concerned.

6.15 The Colleges Compared: Courses and Students:

It was stated, in the introductory Paragraph to Chapter Five, that one of the prime reasons for defining the North East Area as we did was the fact that by this method we achieved an area which was industrially consistent, and within which similar courses might be expected in the various technical colleges. Examination of the courses taking social studies in the area, and the various numbers of students in them, seems to bear this out (28). I will consider first those courses for which Social Studies is required by City And Guilds.

The first thing is to note those courses which are not found in the area at all: these are the Instrumentation courses, the Metallurgical courses, the Aeronautical courses, (28): Newcastle College of Art is not, of course, considered in this Para.

Motor Bodywork (29), and - strangely enough, not even at Billingham Chemical Plant Engineering. These courses are not relevant to the industry of the area, and therefore no provision exists for them. Again, there is a definite group of courses which are met in every college in the area which was examined:

these are the two Mechanical Engineering courses, the Building Trades courses (except at Easington and Darlington), and the General Course in Engineering (except at Durham). In addition Gateshead, Billingham, Hebburn and Darlington - a representative selection of colleges, geographically - operate Steel Fabrication courses (note the connection with two shipbuilding rivers - Tyne and Tees - and with areas of constructional and railway engineering), and, as might be expected the colleges most squarely situated in mining areas - Hebburn, Durham, Easington and Ashington - operate courses in Coal Mining Education.

Almost without consulting any reference works, we could deduce the mining, shipbuilding and heavy engineering character of the area from this information (30). Because Social Studies is required in them by the examining bodies, the courses form the backbone of the work done.

The spread of social studies over other courses is much more variable. This should not, however, be taken as evidence

(29): Motor Body Repair Work exists at some colleges - Gateshead, for instance; but this is a separate course, and takes Technical English, Motor Vehicle Engineering (different again) will be discussed below.

(30): Of the colleges not examined, the author has been informed that Wallsend - see above - also operates Mechanical Engineering courses and that Consett also operates Steel Fabrication courses.

that the courses themselves vary greatly, since one college may well include social studies in courses which in other colleges include only English, or even no liberal subjects at all. This seems to depend on two things: first on the status of liberal education in the college concerned, and second on the policy of the H.M.I.s in the area. As has already been mentioned at several points in the preceding Chapters, the institutionalisation of the subject, and its adoption following the Crowther Report as a desirable component, eventually, in all courses up to O.N.C. level, both by the

Ministry of Education (as it then was) in the 1961 White Paper and by City and Guilds in its 1964-5 Pamphlets, appears to have come at least in part from the activities of an Inspectorate working party, and certainly has been accompanied by a greatly increased Inspectorate pressure on colleges, particularly since 1962, to increase the extent of their social or general studies programmes. The pressure, at least upon those authorities and colleges that have not expanded their programmes voluntarily, appears to be the same throughout the area: but its effectiveness varies directly with the receptivity of the colleges, as described in earlier paragraphs, being perhaps most effective in South Shields and least so, of the colleges examined, in Gateshead. Nevertheless, it has had some effect in all colleges, and for this reason it is difficult to say whether or not, in the absence of other data

on college attitudes - as at Durham or Hebburn for example - the spread of social or general studies teaching to non-City and Guilds courses is or is not an index of spontaneous college interest. There is always the possibility, in examining this type of course, that the college concerned may have yielded to outside Inspectorate pressure in adopting a general studies component: as was pointed out in the chapter on L.E.A. policy, it is for example a possibility that the position in Northumberland may to some extent have arisen in this way.

However, we may clearly take those colleges which make a general practice of extending liberal education over the whole range of courses as showing something more than mere response to Inspectorate pressure, just as we may take those colleges which evince little extension as showing more than usual resistance (the reader should examine Table I at 6.20 for examples, and note the correlation between colleges widely extending Social or General Studies programmes and those described above as possessing a clear internal liberal education policy: the figures for the Certificate in Office Studies should however be discounted, partly because Social Studies is here part of an external scheme, and partly because, as described in Chapter Four, there is good reason for regarding this as a specialist rather than a liberal subject). At this point, it may well be pertinent to ask whether any other outside influence - Industry, for example - may be regarded as influencing either the provision of courses or the inclusion

of a liberal component in them.

This question is a difficult one to answer with any degree of certainty, partly because 'Industry' is so diverse and diffuse in character, and partly because of the tendency, which has already been remarked, for bodies to pay lip-service to the fashionable concepts of liberal education even though they may not be really interested in them. This makes accurate data singularly difficult to obtain.

However, the answer, as far as can be discovered at present, seems to be this. Machinery exists, both by direct contact between colleges and firms releasing students to them and through the statutory bodies discussed in Chapter Three, by which Industry can influence both the provision of courses and their content. In this connection, the City and Guilds syllabuses refer, in their general studies suggestions, to choice of topics desired by industry. This machinery is used, it would appear; but only, as far as I have been able to determine, to ask for particular technical courses to be laid on: I have been unable to find any evidence (at least in the Northern part of the area) that firms have requested any special subjects be included. The position seems to be, that as far as the structure of courses is concerned, except for special advanced courses in such things as Critical Path Analysis, which are clearly outside our terms of reference, industry in general leaves the matter to the colleges and the award-granting bodies. In specifically social studies terms,

we are thus led back to the City and Guilds, the Inspectorate, and the colleges themselves as influencing factors. This lack of active interest on the part of firms should not be misread as obstruction, though: they will willingly co-operate with lecturers, for example, in such matters as granting interviews to students engaged on industrial projects, or supplying them with brochure material: but, significantly, I have been informed by staff of a number of cases where a college desiring to discipline a refractory social studies student has not been able to secure the assistance of the employer (31). As far as I have been able to discover, there is no evidence to suggest that matters are different at the southern end of the area, and it is again perhaps significant that all the Mining Training Centres, which were the industrial concerns written to for course information at the beginning of these researches, since they have Ministry connections, either did not reply, or stated that they did not include a general studies component in their courses, although the City and Guilds Coal Mining Education syllabus requires a minimum social studies time allocation of 25 hours per year, on a syllabus of the college's devising (32).

(31): In fairness to employers, however, it should be pointed out that Union difficulties are liable to arise over any form of student discipline undertaken at work.

(32): City & Guilds Coal Mining Education Syllabus (subjects 25,26,26), 1964 Regulations, page 7: Social Studies. Possibly the M. T.C.s can escape this clause by reason of the fact that they are centres and not colleges ~~to which it is worded to refer.~~

What may be surmised of the attitude of industrial concerns from the above remarks gains additional support from the fact that the 1962 Ministry Pamphlet specifically points out, on page 8, that care needs to be taken lest the student regard general studies as a waste of time for himself and for his employer.

To sum up the position regarding non-City and Guilds courses, then, it appears that the actual technical courses which are laid on to meet the requirements of local industry, again form a fairly coherent block in the area as a whole, although they are not quite as widespread perhaps as the first group of courses referred to above. The question of whether they include a general studies component, an English component or no non-technical component at all, however, is largely left to the college to answer, and the answer it gives may be due to spontaneous college policy or to pressure from external sources - in this case Her Majesty's Inspectors. Thus the most we can say is that a very wide spread of general studies probably argues college as well as Inspectorate interest, as remarked above.

The numbers of students involved, however, vary much more than the numbers of courses, and may range -over all years of a given course - from as few as fourteen (the average size of a technical college class in the area seems to be about fifteen) to as many as 430 (Building Trades, including Ship

joinery etc. at South Shields), While the variation in total numbers, from just over 300 (Easington Technical College, Peterlee) to almost 1000 (West Hartlepool), makes direct comparison of figures dangerous, it is here that we find most clearly the differentiation between colleges within the broad pattern of courses according to local need, and a comparison in terms of majority courses may be attempted. In the colleges associated with large industrial towns - Gateshead, Hebburn, Billingham/Stockton, Darlington and West Hartlepool the mechanical engineering courses predominate, plus in the case of West Hartlepool a very large Building Trades course - probably for the same reason, namely, connection with shipbuilding, that that course also seems to predominate at South Shields for which figures are however incomplete. Curiously enough, however, the same course also predominates at Ashington (where the liberal component of it is not under the control, the reader will remember, of the General Studies Department), and not -as one might reasonably expect - Coal Mining. This may possibly be an indication of the difficulties which the General Studies staff have encountered, rather than any true indication of the bias of the college however. Coal Mining does predominate at Durham and Easington: this is exactly where one would expect to find it. These differences underline, as has already been pointed out, the threefold industrial nature of the area - mining, heavy engineering and shipbuilding. Less easily

accountable, however, is the dominance in Darlington of O.N.C. courses and Motor Vehicle Courses. Finally, one interesting feature of the area is the small number of Pre-Apprenticeship courses being run. It is not likely that this speaks for any high level of Grammar School places: it is more likely to mean that North-East firms are not yet alive to the possibilities of this kind of course. In general, it cannot be too highly stressed that any technical college is intimately dependent (by reason of rulings on the economic size of classes among other things) on a demand existing in local industry for even the most general courses before it can run them. But once again it must be remarked that there is no evidence that this demand influences the structure of courses as such, at least in this area.

6.16 The Colleges Compared: Equipment, Etcetera

Material under this heading was classified under Library, Visits, Aids and Links with College Societies. These will now be considered in turn: the College of Art has been included in this section, and it should also be noted that where South Shields is mentioned, what is being referred to is a statement of intention rather than a statement of fact. The reader should also refer to Table II at 6.20.

All colleges gave instruction in the use of the Library (Durham did not specifically include reference library work in their reply, but the others did), and all colleges also arranged or had arranged at some time for students to work in

the library, although the frequency of both instruction and work varied greatly. Most colleges or their staff (apart from South Shields, Billingham and Durham) took pains to encourage their students to join public libraries but surprisingly few called for book reports from students. Social or Liberal Studies visits were not common for any students and almost non-existent for part-time students, except at Darlington, although other visits (e.g. to factories) were common enough: this however, was mainly due to legal difficulties about insurance (33) rather than to any official restrictions of a policy nature (West Hartlepool - except for library visits - and Gateshead were however exceptions to this comment). About half the colleges, to make up for this, encouraged students where relevant to make visits during their own time - e.g. at weekends - however. Except at Gateshead, South Shields and Hebburn, visits to the colleges by outside lecturers were arranged as another way round this problem: but again practical difficulties made the frequency of these rather variable.

The scale of equipment, with the exception of Gateshead, was generally good, although it should be stressed that at West Hartlepool this was entirely shared equipment. It would

(33): A student on College premises on day or block-release from work is considered, for industrial insurance purposes, as being at work. Should he leave the premises, however, for a visit, he is no longer automatically covered and the college can be held liable for such things as, for instance, road accidents en-route from the place of visit. The point at issue is that such an injury is not 'industrial' in character.

be difficult to say which college was best in this respect, but the palm should probably be divided between Easington, Darlington and the College of Art (where a large amount of equipment was, to paraphrase the economic definition of inflation, chasing very few students). Oddly enough Durham itself seemed to have the smallest range of equipment although what it had was good and plentiful: the usual list (see 6.20 Table II) included T.V., Films and Film Strips, Gramophone and Tape Recorder, Brochures, Wallcharts, Handouts and, of course, teaching textbooks. Oddities were, the lack of T.V. at Billingham, film strips at Hebburn, specifically 'Social Studies', gramophone and tape recorder at Durham, brochures at Billingham, Durham and Easington, wallcharts at West Hartlepool and textbooks at the College of Art, and the fact that Billingham, presumably through the personal whim of a member of staff, possessed a complete set of flannelgraph equipment. Only about half the colleges, incidentally, had sound radio as opposed to television, a situation which the author found difficult to understand. The position over equipment at Gateshead was that a limited selection of these aids was available in college, but for a variety of reasons they were difficult to obtain, so that the effectively available equipment at any given time tended to be in short supply. At no college was there any evidence of equipment requisitions being denied: additions to or omissions from the basic list

displayed at Table II at 6.20 seemed to be due entirely to whether or not the Department itself placed orders for them and seemed to reflect the personal drive of responsible members of staff. The additional effects of this factor on the quality of general studies work in colleges will be discussed further in 6.17 below.

Links with societies were again very variable in nature, being perhaps fullest at Darlington, Easington and the College of Art. About half the colleges had a functioning Students' Union, about the same as had a beat group, a film society, or playreading: this is quite commendable, when one considers that with the type of student attending most of these colleges Unions tend to fall apart unless propped up by the staff, and the same may be said for societies (Darlington of course, had a very large number of societies, because of college policy in the matter). Most colleges had some sort of dramatic group or society, although the degree of student interest in this varied very considerably: only Darlington had a serious music group (too small, really to be called an orchestra). Gateshead and West Hartlepool had nothing at all for reasons already explained.

On balance, then, the scale of activities and equipment did not vary very greatly between colleges and what variations existed seemed to be due more to individual factors of staff personality than to official policy. The question of staffing, and staff status, will now be discussed.

6.17 The Colleges Compared: Rôle and Status of Staff

As far as the official recognition given to the status of the subject in staffing terms which we shall examine first, was concerned, the colleges fell into three well-defined groups, which could virtually be correlated with the degree of genuine official interest shown in the subject. In descending order these were as follows:

First of all, there was a group of colleges in which the subject was either an official Department, on equal terms with other Departments (though, since the number of staff varied from two (Hebburn) to thirteen (Darlington) the member of staff in charge might be graded either as a Head of Department or a responsible Lecturer), or one distinct branch of a General Studies Department, which was recognised as having no other job to do in the college than service this subject. This state of affairs, which obtains at all the Durham Colleges, Darlington, South Shields and the College of Art Newcastle, correlates closely with a progressive liberal education policy and, with the curious exception of Easington, with general and active participation by the staff of other Departments in sports and extra-curricular activities, and in general with a real interest in liberal education in the college. This group is perhaps sufficiently large to be regarded as the norm for the area.

The other two groups are much smaller and much less satisfactory. The second, consists of only one college - Northumberland County Technical College Ashington. Here, it will be recalled, there is officially a Department of General Studies, but its work is not rationally distributed, and it has many additional and distracting commitments. Once again, we may draw a parallel with college policy, which operates a General Studies Department but allows staff vacancies to remain unfilled, and seems to confuse the general studies component of liberal education with industrial history on the one hand and P.E. and evening G.C.E. subjects on the other. It is perhaps a reasonable comment on this policy that by far the most liberal education at Ashington appears to occur in the Building Trades Department and the Students' Union meetings.

Finally, there are two colleges where no genuine department exists - Gateshead, where the staff is poised in some administrative montage midway between the commerce and engineering departments, and West Hartlepool where the staff is scattered among all Departments indiscriminately. Both have Grade Bs in charge of the subject: both have difficulties over equipment: both lack corporate life on the scale of the other colleges. That West Hartlepool has been able to make some progress in this situation, but Gateshead has not, may be explained partly by the fact that West Hartlepool L.E.A. has a policy over social studies, however sketchy, while Gateshead L.E.A. has none, and partly by the difference in

liberality of ~~outlook~~ between the two Grade Bs concerned.

Once again, it should be noted, in this and the preceding two sections, how the colleges in the most progressive Authorities generally lead the field, even in internal organisation. I have already suggested that this may well be due to appointments policy.

This leads us directly to the second main topic of this ~~section~~: the role of individual staff in furthering (or sometimes in hindering) the advance of liberal education in their colleges. It would not, of course, be judicious to quote individual examples either of assistance or of hindrance, so the reader will have to pardon the fact that this part of the chapter is couched in rather more general terms than the rest.

We have already touched on the problem on at least three occasions. In Chapter Five, it was pointed out that the largest authority in the area - Durham County - had developed as part of its liberal education policy a systematic policy regarding appointment of staff. In addition, the role of individual staff in getting a liberal education programme under way at South Shields has been described, and we saw in the last section that there is good reason for thinking that the differences that occur between colleges over scales of equipment and use of the library reflect the personal qualities of Heads of Department - the extent of their 'push' as it were - rather

than college policy as such, since there is no evidence of any equipment at any college being refused once it was requisitioned. (It may, of course, have been held over to the following financial year, but this has been quoted at 6.20 on the few occasions that it has occurred, and is fairly common experience in any case). Further, it has been stressed on several occasions that in the technical college world the extracurricular elements of a liberal education programme - the Students' Union and Societies - are greatly dependent on the existence of active staff support and, to a fair degree, control, for their continued existence: the experience of West Hartlepool C.F.E., whose Students' Union collapsed shortly after control was passed to the students themselves, despite the fact that the students themselves desired to run the society, serves to illustrate the point. Finally, there occurs the odd fact that, in the technical colleges of the area, Durham, which has a highly detailed policy, has the most liberal schemes, while those authorities such as Northumberland and the County Boroughs, which in the main tend to leave the decisions over the subject to the Principals, have the poorest schemes. This is the exact reverse of the situation that obtains in school education; clearly, there must be some factor operating in the nature of technical education to produce this very different result. It could of course be a coincidence - an accident having to do with the type of Principal appointed at colleges: but this I very much doubt.

In fact, the most likely explanation is that an effective liberal education policy in technical education depends upon a tension between official policy and the individual members of staff (especially those running Departments of General Studies). The climate of thought of a technical college is not that of a school. It is larger, its range of subjects is both wider and more one-sided, its staff are more transient, as are its students, and, because it frequently makes use of part-time staff, its staff contacts are more restricted. Above all, its purpose is different. The historical chapters of this thesis stressed the fact that there was a gap of almost exactly one hundred years between the Schools Enquiry Commission (who first put forward the idea that a technical or trade school was a vehicle of education in the broad sense) and the Industrial Training Act of 1964 and its related pamphlets, which completed the institutionalisation of liberal education in such institutions. During the whole of this time, the prime purpose of technical institutions tended to be regarded in practice, whatever might be said in theory, as being concerned not with education in the normal sense but with training. It is clear, from their Proceedings, that the Institute of Mechanical Engineers were still of this opinion in 1963; in the section referred to in Chapter Three, they asked in plain language whether the country needed trained technologists or ineffectual workers broadly educated (this is

a paraphrase, but the emotive force of the remarks was exactly this). It would appear from what has been said earlier in this Chapter that industrial firms still subscribe to this view: so, accordingly, will many students, and so will many teachers of the engineering and trade subjects, who are necessarily recruited from industry.

The position of the 'liberalist', therefore, is very different in a technical college from what it is in a school. He is required to work against the grain, as it were. He must convince both staff and students that what he has to offer is of value, as so many of the persons referred to in this thesis have pointed out. And what he has to offer is a commodity to which technical education is not much used, towards which it is not in practice angled, for which its customers - industrial firms - evince no market demand, and which it does not really feel, as often as not, to be of much use any way - general education as distinct from specialist training. And it is no good for the liberalist to protest that what he has to purvey is not supposed to be 'of use' in this limited practical sense, for the technical college atmosphere and organisation is that of an institution dedicated to practical use, as is after all, considering its practical economic function, to be expected.

This description of college attitudes may sound exaggerated, but it is not: it can however be made more explicit. What happens is that the general atmosphere of the college tends all the time towards stressing practical requirements and the

examination pass list, and that, because of the college's social and industrial function as a training institution, the organisation of a technical college is properly set up in such a way as to tend to favour training schemes rather than schemes of general education. Sociologically, it is what it was claimed to be in Chapter Two, a growing substitute for apprenticeship. Thus the liberal educator finds himself not only working against the grain, but, as it were, actually under social and institutional pressures to deliberalise himself: an illustration of this may be seen in the way in which many technical colleges all over the country were found by the author when he examined material from them posted with City and Guilds, to be following that body's suggestions for general studies as if it were a received syllabus, and to be setting formal social studies examination papers of precisely the type which the City and Guilds disliked, despite the fact that under the regulations then in force examinations were no longer required.

It is clear, therefore, that this situation demands two distinct things for liberal education to be successful. In the first place, it requires, unlike school education, full and detailed outside, L.E.A. support for the liberal studies staff: without this, they have no locus standi with the college authorities, and are therefore in the weakest possible position to attempt to establish themselves; for it must be remembered that they are attempting to establish that which is counter to

the ~~gestalt~~ of the organisation of which they are part. In the second place, it requires the appointment of members of staff combining a number of rather unusual qualities: liberality of temper, persistence in the face of adversity, energy, the desire to experiment, and sufficient scientific, industrial or other broad experience to enable themselves to meet their technical compatriots as equals and command the industrial respect of the students with whom they have to deal. If they cannot do this last, incidentally, they will never command any respect at all: and without one or the other of these two prerequisites, the liberal education programme will fail. In addition, the institutionalised nature of technical education as a whole makes it imperative that there must be a formal organisation of the liberal staff within the college - A Department - of sufficient status to allow the energy and experiment referred to to be fed back into the organisational system as a whole. It has already been pointed out that the difficulties encountered by staff at some colleges are the result of this not being so, and this of course is definitely a matter of L.E.A. policy.

Thus, we may see that the effectiveness of the Durham technical colleges in the liberal education field rests upon the fact that they do have such a policy. What makes the policy effective however is that it is a policy not only of aim and provision or of departmental status, but a policy of staff appointment. The constructive tension between individual

staff and L.E.A. policy must be created and maintained. The simple appointment of liberal arts graduates, often untrained as teachers, which obtains in many places, is not enough, since the liberal arts graduate is non-industrial (or - worse from a student point of view - managerial), and therefore does not command the necessary respect. This might perhaps be countered by the appointment of specialist lecturers - in communication, economics, or social science for example - who would perhaps command the sort of 'respect for a skilled man in another trade' given to such members of staff as mathematics lecturers, but this does not obtain in the area, except at the two Regional Colleges of Technology - Sunderland and Rutherford - which are outside my terms of reference in any case. The appointment of technical staff is hampered by the fact that liberally qualified technical staff, as pointed out several times before in this thesis, are rare.

Durham and Darlington and now South Shields meet this problem by recruiting as a matter of policy, a particular kind of man: an energetic man, of liberal temper (often a liberal arts graduate, but not necessarily so), who has had sufficient experience of life or industry to command the necessary respect both from students and from technical staff. It should, however, be stressed that this is necessary primarily in the initial stages of setting up a liberal education scheme. Once the scheme has become accepted within the college, the difficulties I have described will tend to vanish, because liberal education

and activities have become an accepted part of college organisation (all institutions are resistant to change, including change which involves a reversal of previous changes which have been made for long enough to become institutionalised). At this point, although there may still be discipline problems, the recruitment of staff becomes a less difficult matter: but this point, in as new a subject as liberal studies, is only just beginning to be reached.

The recruitment of this type of lecturer is however not without its difficulties. The staff catchment area of the type of technical college with which we are concerned would seem to consist mainly of the following types:

1. The technical or trade lecturer, originally a technician, technologist or craftsman in industry, attracted by better conditions of service: often insufficiently liberal.
2. The newly qualified teacher, attracted by pay differentials and (usually imaginary) status: normally too immature. Or the older teacher: too academic.
3. The new graduate, especially in a subject not marketable in industry, without a teaching qualification and with nowhere else to go: generally unsuitable.
4. A 'mixed bag' of persons returning from service abroad, retiring from the Army or Police etc. Probably the most fruitful field, but still rather suspect: just why is the candidate changing horses in mid-stream?

5. The part-timer, self-employed or a married woman.

The first of these types makes up a large proportion of the technical staff. In the technical departments, he is extremely valuable, but all too often he lacks the qualities of temperament necessary to a liberal teacher. The second, third and fourth types make up mainly the general studies and other non-industrial staff: the second and third type in particular are quite simply too young to have developed the qualities needed for the job, in many cases. The part-time teacher has of course little reason to forge those personal links with staff and student life which have already been described as one essential part of the function of the individual liberal educator.

Under these circumstances, it is a source of wonder that the Durham appointments policy has worked as well as it has: it is probably due to the fact that the greatest care has been taken, in each case, over the appointment of the key figure - the Head of Department or Lecturer responsible. Of the remaining staff, reference to Table III at 6.20 will show that a proportion of technical personnel have been seconded to liberal education, where they showed the desired characteristics: this has worked very well, and is of course in line both with the 1957 Circular and the 1962 Ministry Pamphlet: but inevitably they are few in number. The remaining appointments, in Durham and elsewhere, are primarily arts graduates, who at

present command the field by the simple operation of the laws of supply and demand. In some respects this is perhaps a pity.

6.18 The Colleges Compared: Methods.

Once again, there was a fair degree of uniformity between colleges over the presentation of the subject, and where colleges departed noticeably from this (as, for instance, in concentrating on formal teaching, as at Ashington, except in the Building Trades Department), the status and progressiveness of the subject seemed to suffer. A full table of methods, both officially suggested and actually adopted, will be given at 6.20 below, and one of the objects of the statistical survey in Chapter Seven will be to attempt to establish which methods, if any, seem to work best for students: all that is necessary here, therefore, is a summary of what was attempted.

Most colleges made use of discussion techniques very fully, sometimes accompanied by lectures, and sometimes not: in addition, the Durham colleges tended to stress the wide modification of work to suit individual student needs, and a centrifugal approach to the subject. Quite a number of colleges also stressed the value of the project method, though in a number of cases (e.g. at Billingham) these were felt to be best restricted to the higher levels of student

(31).. A particularly interesting variant of these methods was found to be used at West Hartlepool, where discussions were initiated not by reference to a prior lecture or assignment, but to a comprehension passage on a social studies topic read in class. This does not seem to be widely used elsewhere.

6.19 Six Colleges Compared: Material Taught.

The final comparison concerns the material from the many, and often bulky, syllabuses or suggestions discussed in preceding Chapters actually taught in Colleges. For this purpose, the session to be considered will be 1964/65, and the colleges considered those who finally made their staff available and supplied information for the battery of tests given to selected classes, to be discussed in the next Chapter. These, in the final instance, were six in number: Billingham, Hebburn, Ashington (which later withdrew), Darlington, West Hartlepool and Gateshead.

Ashington may be disposed of first: as has already been suggested, not very much social studies, outside the Building Trades Department, which followed the City and Guilds syllabus, was actually taught. What did exist consisted of the College's own History of Industry course. This may be summed up

(31): The author's experience, during comparative experiments using different methods with parallel classes at Gateshead over the period 1962-5, has tended to suggest that this is true for individual projects, but not for group or class projects. In particular, a craft class of age 15 plus turned out a surprisingly full project booklet on Gateshead and its surroundings. Some of these experimental classes will be referred to in the next Chapter.

essentially as consisting of a study of the students' firms, of the history of Mining in the North East, of the Development of the North East and the country as a whole, of the Trades Unions, Trade, the Common Market and assorted current problems. The entire material is presented formally, and the general emphasis is a historical one. Hebburn and West Hartlepool may similarly be summed up fairly briefly: they both make selections from the City and Guilds suggestions, for actual social studies teaching, based on the needs of the classes, plus English in the case of West Hartlepool and the History of Engineering and of Science in both cases for O.N.C. students. Darlington may similarly be described as presenting varied selections from its own internal syllabuses, in accordance with the students' needs. In the cases of Darlington and Hebburn, however, it must be stressed that, as pointed out above, there are various schemes for optional choices of liberal activities other than social studies teaching.

The two remaining colleges are Stockton/Billingham, where a free choice of material is encouraged by the Head of Department, and Gateshead where, as has been described above, the staff have tended to take matters very much into their own hands. Both colleges, influenced no doubt by the fact that 1964 was a general election year, ran studies of the election, and of national/local government: Gateshead also went further

and with a few classes (not necessarily those for which the subject was officially suggested) ran studies of different systems of government - monarchy, republicanism, federal and unitary states, communism and free democracy, etc. We may also relate to this a number of classes which went on to study the United Nations and the Specialist Agencies, and to survey current world problems - disarmament, race relations, population, and food. Similarly extensions were made at Billingham.

The second 'topical' group of subjects - sparked off partly, no doubt, by the Government's decisions about cigarette advertising, and the passing into law of the new Hire Purchase Act - included advertising (and its companion subject, rational persuasion), hire purchase, credit sales, mortgages, holiday arrangements and at Gateshead only - cigarette smoking and lung cancer. Both colleges also devoted some considerable time in selected courses at different levels, to social aspects of engineering or inventions, a topic which is also of course to be found on several City and Guilds suggestion schemes. Billingham also ran a series of courses on Law, Crime and Punishment, which the 1962 Pamphlet includes, but City and Guilds schemes (curiously) omit.

So far, the subjects at these two colleges are clearly related to current issues - even Law, with one Gateshead course, a series of discussions on individual morality and the 'permissive society' (which on the whole was too advanced for

students and was not a success), can be clearly related to currently controversial or important topics in society at large, and it may be assumed where no direct information was given that the selections made from the larger syllabuses or suggestions in the other colleges were dictated by much the same considerations. In the case of Gateshead, however, partly because of the larger number of staff involved, partly because of the fact that subject choice was a matter of independent staff action rather than of college policy, and partly because of the lack of liberal activities which forced the staff to extend the range of their syllabuses, as has been described earlier in this Chapter, a fair number of additional topics, of interest to particular staff or students, were also covered. Some of the more interesting of these have already been quoted, in 6.12 above. Of the others, we may perhaps select for mention courses dealing with The Press, the History of Language (not very successful), Local Industry, and Town Planning, as well as various discussion groups on the uses of leisure and one course of Sex Education, with a Fabrication of Steel Second Year class.

Thus, in brief, we may note here, as in other sections, a 'tension' between outside forces - in this case current events and C. & G. syllabuses - and individual staff personalities and interests. Once again, the personal factors seem to have the greatest influence.

6.20 Conclusion and Summary Tables.

This completes the description of social studies work as it appears 'on the ground', so to speak, in the area selected for study. From the foregoing sections, it will be seen that there is a close connection between college success in the subject, Local Authority policy, and such factors as available funds and local culture. It will also be seen that the appointment status of staff, and the teaching methods adopted, may be correlated fairly closely with these overall factors. Finally, it will be seen that the degree of spread of the subject to courses where it is not compulsory is a fair, though not exact, indicator of the subject's success at the college level, but that, despite local differences in student numbers, due to college situation, the general pattern of courses (which depends on industry), and the material selected for teaching (which seems to depend largely on current social preoccupations) remain fairly constant.

In addition to these factors that correlate with local authority policy, however, it has also come to light that a number of important aspects of liberal education - breadth of course, liberal activities, scale of equipment, degree of experimentation, and status of staff within the colleges among them - correlate closely with the appointment of individual staff having a particular personality type and outlook. The most important single thing to be revealed by this survey of

the actual colleges themselves is the existence, in those colleges which have flourishing liberal education programmes, of what I have called a 'creative tension' between policy, whether local or Ministerial, and individual staff personalities. It, therefore, follows that the most important aspect of any local authority policy over liberal education at this level is its appointments policy, and that this policy is subject to more difficulties than usual in the teaching profession. It has also been made clear that the purpose and ~~gestalt~~ of a technical college, in terms of social and industrial demand, is quite different from other, school, forms of local authority education, and that accordingly education policies have had quite the reverse effect from that to which their framers are used, in schools: this hitherto unsuspected situation may have caused at least one authority with an otherwise good record (Northumberland) to come to grief over its technical liberal education policy.

Finally, it has been suggested that the liberal component of technical courses is very little affected by, and of very little concern to, industrial requirements, although, as has been said above, the technical courses themselves are closely linked to industry, and it has been shown quite clearly that, although certain difficulties over visits and the like arise, in all the authorities in the area general studies departments have had a fair 'crack of the whip'

over equipment, provided they have requisitioned it.

The material will now be summarised for easy reference in the tables that follow.

<u>Datum</u>	<u>G'head</u>	<u>S. Shields</u> (intention)	<u>Hebburn</u>	<u>B'ham</u>	<u>Durham</u>	<u>E'ton</u>	<u>Coll. of Art N/cle</u>	<u>A'ton</u>	<u>D'ton</u>	<u>W.H'l</u>
<u>LIBRARY</u>										
Instr. in use	If on C&G syll.	YES	YES	YES	YES	By Librarian	YES	YES	YES	YES
Instr. in Ref.		YES	YES	YES		By Librarian	YES	YES	YES	YES
Class use		Occasional	F.TCl,	Irreg.	Occnl.	YES	YES	Tutor Lib'n	YES	Public Library
Pub.Lib. Mem. Membership	Enc. by Staff		YES			YES	YES	YES	YES	YES
Book Reprs.	Enc. by Staff						YES	YES	YES	YES
<hr/>										
<u>VISITS</u>										
Full Time	Enc. by Staff	Careers				YES	YES	YES	YES	To Pub. Library
PTD Clt.		Careers			Occnl.			Sometimes	YES	To Pub. Library
Other than Soc. Stud.	Firms	Commerce	FT only			Collieries	Art App'n	YES	YES	YES
Student Initiative	Enc. by Staff	YES		YES			YES	Through Societies	YES	
Visiting Lecturers				Occnl.	Pilot Scheme	Occnl.	YES	YES	Occnl.	One Coming

Table 1: General Analysis of Courses & Students

<u>Course</u>	<u>G'head</u>	<u>S.Shields</u>	<u>Hebburn</u>	<u>B'ham</u>	<u>Durham</u>	<u>E'ton</u>	<u>A'ton</u>	<u>D'ton</u>	<u>W.H'l.</u>
<u>C. & G.</u>									
Inst. Maint.									
Inst. Prod.									
Inst. Tech.									
M.E.C.P.	225	??	84	195	60		30	135	180
M.E.T.	240	??	140	105	30	15	45	150	105
Met. Tech.									
Foundry (English)									
Fab. Steel.	140		14	105				60	
Coal Mining			112		420	190	60		
Chem. Plant									
Motor Body									
Aero. Eng.									
Bldg. Crafts	20	430	25	100	120		315		300
G Courses	117	??	14	75		100	80	45	90
<hr/>									
<u>Non C. & G. (classes taking English only NOT quoted)</u>									
Nursing etc.	23	50(?)	30	50			40		60
Catering		50(?)							
C.O.S.	??	??	30	45			80	30	45
Sheet Met.				30				30	
Elec. Fit.				60	45		20	90	30
Elec Tech.					30	15			45
Radio/T.V.					60				
M.Veh.					15		15	180	30
M.V.B'smiths							30		
Pre-App.		90					15	60	45
Pre-Sea		30							
O.N.C./O.N.D.		90					25	120	60
Civil Ser. (Exams only)					30		20	15	
TOTAL:	765	incomplete	427	765	810	320	855	795	990

The sign ?? indicates that a course exists, but numbers have not been supplied.

Table II Continued

<u>Datum</u>	<u>G'head</u>	<u>S.Shields</u>	<u>Hebburn</u>	<u>B'ham</u>	<u>Durham</u>	<u>E'ton</u>	<u>Coll. of Art N/cle</u>	<u>A'ton</u>	<u>D'ton</u>	<u>W.H'l</u>
<u>LINKS WITH SOCIETIES</u>										
Playreading			YES			YES	YES	YES	YES	
Drama etc.		YES	Unsuccessful	YES	YES	YES	YES	YES	YES	
Film Socy.		YES				YES	YES(64/5)	YES	Civic	
Orchestra									YES	
Beat Groups		YES				YES	YES		YES	
Union	Dormant	YES	??	YES	YES			V.Strong	V.Strong	Formerly
<u>TEACHING AIDS FOR SOCIAL STUDIES WORK</u>										
Radio		YES		YES		YES			YES	Available
Television	Available	YES	Occnl.		Pilot	YES	YES	YES	YES	Acc. to L.E.A.
Films	Difficult to obtain	YES	YES	YES	YES	YES	V. Imp.	YES	YES	Available
Film strips	Difficult to obtain	Available		YES	YES	YES	YES	YES	YES	Available
Gramophone Tape	Ex-Union	Available	YES	YES		YES	YES	YES	YES	Borrowed
Recorder	Broken	YES	YES	YES		YES	YES	YES	YES	Available
Brochures		YES	YES	YES			YES	YES	YES	Some
Wallcharts			YES	YES		YES	YES	YES	YES	
Stencilled Handouts	Prepared by Staff	YES	YES	YES	YES	YES	YES	YES	Prepared by Staff	Available
Books Available	English only	YES	YES	YES	YES	Arnold Kingsford		Studs. Buy	FT Stds only	Some
Flannelgraphs				YES						

Note: In this table 'Yes' means fully available to social studies staff, reserved for Departmental use. 'Available' means joint with other Departments.

Table IV: Summary of Methods Recommended & Used

<u>Method</u>	<u>Recommended by Lit.</u>	<u>Recommended by College</u>	<u>Used by College</u>
Tutorials A	323/57: A.L.E. 1962 Pamphlet Stygall	Durham	Durham
Use of Student Interest & Res. B	Melbourne 1945: Stygall 1946 Pamphlet: A.L.E. 323/57: C&G'57	Hebburn: Gateshead: Coll. of Art: S. Shields: Ashington: D'ton: W.H.	W.H'l: G'head: D'ton: B'Ham; A'ton: Hebburn
Discussion C	Melbourne 1945: 1962 Pam. 1946 Pamphlet: Stygall 323/57: C&G '57: A.L.E.	Durham: Hebburn: E'ton: Coll. of Art: S. Shields: Ashington: D'ton: W.H.	Durham: W'H'l. G'head: Hebburn B'ham: A'ton: D'ton.
Activities D	323/57 1962 Pamphlet	Hebburn: Easington: Coll. of Art: A'ton:	Durham: Hebburn
Variable approach- std. centred E	Melbourne 1945: Stygall 1946 Pamphlet 323/57: C&G'57	Billingham: Easington: S. Shields: Ashington	Durham: S. Shields
Centrifugal F	Melbourne 1945: Stygall 1946 Pamphlet 323/57: 1962 Pam.	Durham: Bilingham: Hebburn: Easington Ashington	Durham: G'head Bilingham
Reports and O.S. Lecturers G	Melbourne 1945: 1962 Pam. 1946 Pamphlet: Stygall: 323/57: C&G'57	G'head: Coll. of Art: S. Shields: Darlington	Darlington
Visits H	Melbourne 1945: 323/57 C&G'57: 1962 Pamphlet	Coll. of Art: Ashington: West Hartlepool	West Hartlepool
Formal Lectures: I	(NOT to be used: most writers)	Gateshead: Darlington	G'head: D'ton: B'ham: A'ton: Hebburn
Contact with Inst'ns O/Seas J	323/57		
Critical Exam. of Material K	323/57		
Comprehension & Discussion L		West Hartlepool	West Hartlepool Gateshead

The capital letters represent the classification code used when asking Colleges to indicate their recommendations.

Table V: Comparison of Material studied in
Six Colleges, 1964-65 Session

<u>Material</u>	<u>Hebburn</u>	<u>Ashington</u>	<u>Darlington</u>	<u>Billingham</u>	<u>W.Hart.</u>	<u>G'head</u>
G. & G. Gen.	YES	Bldg.			YES	YES
Tech.English	YES	YES			YES	YES
Info.Ret'l	(HNC)					MT3
Logic etc.				Jnr.C11.		MT4
Nat.Govt.		Civil Ser.	YES	Jnr.Classes	YES	
1964 Election			Pre-App	Jnr.C11.		MC/MT
Systems of Govt.			YES	Jnr.C11.		MT2
Law etc.			YES	Snr.C11 (S3)		MT4
H.P. etc.				Jnr.C11.		MT4
Advertising				Jnr.C11.		MC/MT
Gambling				Jnr.C11.		
Holidays						MC/MT
Hist. of Eng.	ONC	Engineers	YES	ONC		MC/MT
Hist. of Ind.		Engineers	YES		ONC	MC/MT
Firms		Engineers	Pre-App(?)			FS/MC
Dvpt. of N.E.		Engineers				FS/MC
Dvpt. of U.K.		Engineers	YES		ONC	
Trade		Engineers				MT2
Common Mkt.		Engineers				MC1
Current Probs.		Engineers	YES		YES	YES
Trades Unions		Engineers	Pre-App.		YES	FS1
Local Govt.			YES		YES	MC3/4
Taxation			YES			MC3
Banking			Pre-App.			
Stock Exchange			Pre-App.			
Welfare State			YES			MC4
Uses of Leisure			YES			YES
Transport					ONC	MT4
Living in Society					ONC	YES

(Gateshead also ran short courses on various other topics not mentioned above.)

CHAPTER SEVENAN ASSESSMENT OF THE EFFECTIVENESS OF SOCIAL STUDIES
TEACHING IN ATTAINING ITS PROPOSED OBJECTIVES.

7.1 So far, the aim of this thesis has been to describe the origins, the development, and the present state of social studies teaching in technical colleges in Britain, and examine in the case of a specific area those factors which enter into the practice of the subject. The only sense in which it may be described as critical is in so far as it has examined certain of the concepts put forward by the writers or educational bodies concerning themselves with the subject, from the standpoint of logical consistency, or accuracy to social fact, and has commented on certain material discovered during the local area investigations from the point of view of whether the authorities or colleges concerned are in fact implementing what the Department of Education and Science or the City and Guilds, or the general rationale of the subject, seems to require should be done. The basic premiss of the subject, however, that by a certain kind of educational activity, including a certain kind of class teaching (such as has been described), it is possible to produce determinate social individuals of a certain particular type, with the breadth of span and interest, and the particular attitudes of mind and judgment described in Chapter Four above, has not been questioned. Yet clearly this is a question which it is meaningful to ask, it is a question which is of the greatest importance within any study of the subject, and it is a

question which indeed has from time to time been asked, notably at the Institute of Mechanical Engineers' Conference on the Training of Technicians of 21st and 22nd March, 1963, discussed in Chapter Three.(1)

This Chapter sets out to attempt to answer this question, in a way which so far as the author is aware has not previously been attempted. All too often, in the discussion of the suitability or otherwise of a particular method or subject to a particular stage of education, it has been the normal usage to justify it on grounds of logical consistency, of social desirability, or of subjective assessment by the teacher of what the student has derived from his teaching. The last of these in particular, from an experienced teacher, can be of great value: but all three in some sense beg the question. Reality is, we know, rarely consistently logical, in the simple two-value non-quantised sense of the word which is used in discussing these topics: and as we saw in the section of Chapter Five on staffing, the question of the social desirability of something tends, in human institutions, to be confused with the existence of a social or economic interest in maintaining it, even if this is as simple as the human mind's response to the known pattern of a tradition. The fact that social studies teaching is both the application of the latest form of a long cultural tradition - that of the

(1): Proceedings of the Conference on the Education and Training of Engineering Technicians, 21st/22nd March 1963, I.Mech.E., 1963, pages 25ff.

'education for a free man' - and, now, an institutionalised subject with persons having interest in its continuation in something resembling its present form will therefore tend to make any discussion of it in general verbal terms liable to error: and the danger of the discussion of the efficacy of any subject in logical terms alone, is that there exists, because reality is not organised on the simple two-value logical patterns which the human mind finds it easy to recognise, a tendency to confuse, 'this ought to result in that' with 'this does result in that' - in short, to present as a logical proposition, and also as factually true, something which is really midway between a value judgment and a pious hope.

For all these reasons, it was not considered desirable to discuss the basic premiss on which the concepts of liberal education rest during that part of the thesis which was concerned with tracing their development or national or local application. But clearly, it is necessary, to complete our analysis of the subject, that a means should be found whereby we may obtain at least some indication of whether or not the subject as at present constituted and taught does in fact have the effects upon the students to whom it is taught that it is intended to have. This method should ideally be objective: and, since effects upon large groups of individuals are concerned, the mode of investigation to be used should be a statistical one. The remainder of this chapter will

describe the attempt to administer such an objective test of efficiency, and discuss the statistical results obtained from it.

7.2 The Nature and Type of Test Instruments Used.

Having decided that the method of testing the effectiveness of social studies teaching should be a statistical one, the author was then faced with three problems. The first was to determine what it was precisely that was to be tested. The second was to determine whether any known objective method of testing for the selected characteristics existed. The third was to determine how the test should be constructed, in view of the diverse nature of the teaching received by the group used for survey. These will now be discussed in turn.

At first sight, the number of different things which social studies teaching is supposed to accomplish is so bewildering that it would seem impossible to construct a battery of tests capable of dealing with all of them, and to deal even with those individual aims which are precisely expressed would involve so large a battery that very few colleges would be prepared to give up valuable student hours in order to administer it. Reference to the table of official aims in Chapter Three, the comparison table of syllabus material in Chapter Four, and the statements of L.E.A. and college aims in Chapters Five and Six, however, shows us that beneath this apparent diversity, there lies a considerable degree of uniformity. All social studies teaching may be summarised as being directed towards three basic ends: first,

to cultivate in the student maturity of outlook, a sense of social responsibility, and the ability to make independent rational social and ethical judgments; second, to extend the student's cultural span over as many areas as possible of a wide but nevertheless defined field of understanding; and third, to improve the student's ability to communicate with his fellow men. If it were to be possible to assess social studies teaching at all, then, it would have to be in respect of student progress in these three broad and basic fields, rather than in any more specialist terms. This was also obvious from the very diverse subject-matter and methods of the teaching being done.

Before proceeding any further, therefore, the colleges which had agreed to allow themselves to be examined for Chapter Six were approached and asked if they would agree, in principle at least, to the administration to a number of their students of objective tests designed to assess student achievement in these broad areas, assuming that such could be devised. All accepted in principle the idea of tests of cultural span - Darlington, indeed, had already attempted such a thing internally - and of social attitudes: but it soon became obvious that the majority of colleges resented any suggestion of attempting to measure the standard of communication of their students, which they feared might be seen as direct criticism of the ability of their staff as English teachers. It was therefore unfortunately necessary

to abandon any idea of testing this aspect of social studies work: this was particularly unfortunate, since many bodies attach a great deal of importance to this part of the courses. It is to be hoped that other workers in this field will be able to have better success at a later date. (2)

The question now arose as to whether any type of objective test could be devised in the fields of general cultural span and social attitudes which would yield statistically meaningful results. It was not felt that the cultural span test administered in Darlington would be very helpful here, since this was tailored to a small group of students working mainly on three particular courses (the two Darlington courses and the City and Guilds M.E.C.P. courses), to syllabuses collated by the Head of Department in the manner described in the last Chapter in respect of the particular academic year 1961/2: what was required was a form of test that would be generally acceptable.

A bibliographical check of the available material led to the discovery that a test of cultural span similar to that being sought had been devised by Kenneth Richmond, for use in the surveys described in this book 'Culture and General Education' (Methuen, 1963). This book proposed a number of interesting theses: among them, those immediately relevant to the problem on hand were:

- (2) The author understands that the Association for Liberal Education (Manchester area) is collecting information on this matter, but has not been able to discover with what success.

(a) that education is concerned with three cultures: Arts, Science, and (following objections to certain earlier tests of Richmond's quoted in 'Science' for November 1961) what is termed 'Man in Society'.

(3).

(b) that within these fields the basic touchstones of 'academic' or 'Establishment' culture - broadly the culture which educative processes are designed to impart - can be delineated and objective multiple-choice tests of acquaintance with them set up. (4) These tests were mainly composed of a series of multiple choice questions asking the student to identify basic information, or key information, in the various scientific or artistic or social fields examined. The importance of the questions asked to knowledge of the fields concerned was checked by submitting them to specialists in those fields.

(3): Richmond, Culture and General Education, Methuen 1963, p.34. In fact this third element, the most important from our standpoint, appeared to be mirrored more in the administration of the tests than in the test questions especially in that of the second test (page 109).

(4): Ibid., pp21-22, and the tests themselves, as quoted. It should be stressed that Richmond's original tests were designed for use with University staff and students, although they were also administered to sixth-formers and training college students.

(c) That the results of these tests are statistically meaningful, and that the scores have the following characteristics:

(i) they are frequently far lower or more lopsided than might be expected or desired.
(5).

(ii) they are influenced by I.Q. (6), subject of study (7), social class (8), and creativity (9).

(5): Ibid., page 175.

(6): Ibid., pages 67-69 and Fig IV.

(7): Ibid., Chapter 5 passim: it should be noted that Engineering students appear particularly weak.

(8): Ibid., pp. 80-81. Richmond makes the interpretation that conventional liberal education 'has always seemed foreign to working-class people who have instinctively rejected it 'it was originally intended for the gentry, and subsequently, in modified form, for the professional middle class . . . in this respect, the standard of general education of the majority of young people in Britain is lower than that of their opposite numbers in the U.S.A. . . . If we must talk of Two Cultures, these are the two which ought to give rise to genuine disquiet.' It will be seen that he is in fact outlining the very situation which social studies teaching purports to set out, in part, to cure.

(9): Ibid., pp. 77-78. Creativity is found to be higher among arts students. For a further discussion of the term, and its additional connection with tests of social attitude, see below, the discussion of 'Creativity and Intelligence' by Getzels and Jackson.

Thesis (a) is, basically, making the same points as the protagonists of Social or General Studies - that a balanced and rounded cultural personality is desirable (10); and Richmond points out that not only intensive study but also working conditions may militate against achieving this (11). Thus Richmond's general assumptions and the rationale of his tests are commensurate with the purpose of this Chapter. It therefore appears prima facie possible that the type of test he worked out may be applicable to the present field of study.

Given this, it is possible to make the following deductions from theses (b) and (c):

(i) that the factors we seek to test here are not entirely identical with Richmond's, although they cover much common ground

(a) because they involve more questions concerning 'man in society' than his tests

(b) because they are more proletarian and less academic.

(ii) that Richmond's own tests will therefore not serve us, for the above reasons, and also because effective total scores in them require levels of I.Q. and general education above the range of most of our students.

(10); Ibid., page 178.

(11): Ibid., page 180.

but (iii) that using Richmond's procedure as a model, it would be possible to devise a similar form of multiple-choice test suitable for our range of material, I.Q., and educational level, which would yield statistically meaningful results.

On the basis of this argument, it was decided that the test of cultural span should basically be a multiple-choice test of key or basic information in the areas of social studies teaching, devised on lines similar to that of Richmond. As it was hypothesised both on personal teaching experience and on Richmond's argument, that there was a distinct likelihood of factors such as course level or age affecting the results of such a test, a control group who had received no social studies teaching, of sufficient size and diversity in respect of these factors to be itself amenable to internal analysis was deemed necessary. This was found to be forthcoming in Gateshead, where electrical engineering students of all levels and ages took Technical English instead of social studies. It also became clear at this point that it would be necessary to include with the tests a personal questionnaire on which the student could indicate his course, age, previous education, and such elements of his home background as would be liable to affect his score. In order to allow for the fact that much social material is retained at a preconscious level, it was decided that the student should be allowed, as in Richmond's tests, to 'guess' at an answer he did not consciously know.

It was noted that in Richmond's tests creativity affected scoring. As is fairly well known, creativity is an ability of mind varying independently of I.Q., and with a relationship to it not exactly clear, which affects the individual's capacity, among other things, to formulate value judgments and make independent social decisions. The basic researches in this field were those of Getzels and Jackson, published in their book 'Creativity and Intelligence' (Wiley & Sons, 1962). It appeared likely that an examination of the theses propounded by Getzels and Jackson, and the instruments advised by them, might yield valuable suggestions as to means of testing social judgments and attitudes, as Richmond's had done for tests of cultural span.

It was stated that the object of Getzels' and Jackson's survey was, by analysing the performance of gifted children, to demonstrate that at least one other factor besides I.Q., affected the quality of their performance. To this factor - apparently a function of the preconscious - they gave the name 'creativity'. Among its major characteristics could be listed an openness to new experience, a willingness to view percepts in original combinations or from original frames of reference, and a sort of playfulness (related to the exploratory playfulness of the young child) which finds excitement and delight in handling ideas and experiences, in investigation, questioning, and imaginative extension.

This attitude of mind is without doubt one type of attitude which can be said to characterise the 'liberal man': but although it is one which many teachers passionately desire and work for, it is not one which can be brought about by a syllabus. If it is to be encouraged - and Getzels¹² and Jackson's work seems to indicate that it is possible for this to be done, even though the potential degree of creative ability may originate within what may be called the 'genetic personality' - the methods by which this can be done are by no means clear (12). The ability is also difficult to test for, and indeed is not perhaps a specific objective of social studies teaching as such, but rather of liberal education in general.

However, this attitude appears to be related to another attitude, that Getzels and Jackson refer to as 'high morality' (13), the leading traits of which can again be recognised as

- (12): Getzels and Jackson, *Creativity and Intelligence*, Wiley 1962: page 128: 'The problem, however, is that no one as yet knows how to educate for creativity: page 131: ' . . . we really know very little about what qualities in a teacher make for what qualities in a learner. We may assume that some teachers have probably always encouraged creative performance without knowing just what they did or why, and other teachers have probably discouraged creative performance again without knowing just what they did or why'.
- (13): *Ibid.*, page 158: 'The high I.Q. and the high adjusted groups appear to hold in common qualities that are the reverse of those shared by the high creativity and the high moral groups'.

traits both genuinely liberal and closely connected with the aims and objectives of social studies teaching, in the sense in which the term is used in this thesis, as these have been set out in Chapter Three. The authors say:

'A moral person characteristically

1. chooses the ethical rather than the expedient alternative when faced with an interpersonal dilemma;
 2. stands against public sentiment when such sentiment threatens to compromise his values;
 3. feels allegiance and responsibility for principles and causes;
 4. identifies with humanity beyond the immediate confines of his own group;
 5. feels compassion for wrongdoers without condoning their specific acts;
 6. perceives and admits his own shortcomings;
 7. holds to personal ideals transcending such qualities as appearance and social acceptability.'
- (14).

The reader is invited to compare this definition with that of Russell's 'excellent individual' in Chapter Two or Clarke's 'citizen type' in Chapter Three. In testing for the presence or absence of these qualities, Getzels and Jackson make use,

(14): Ibid., page 135.

among other things, of the device of giving a multiple choice of answers to the question 'What would you do' (or, 'advise X to do') 'if . . . ', a given problem situation being then described. Two of the four choices they give for each situation (15) involve moral responses, one 'absolute' and one 'expedient', and the other two do not. In the addition, the number of students supposedly making that choice in an imaginary previous survey are given for each alternative, in an attempt to simulate social pressure. The test yielded statistically meaningful results.

Since it is commonly believed to be the job of the social studies teacher not only to increase knowledge and awareness of the world around his students, but also to change their attitudes to that world in a direction - towards tolerance, generosity, maturity of vision, careful and independent rational judgment, ethical sensibility - analogous to that of 'high morality' as defined by Getzels and Jackson, it was felt reasonable to make use of an instrument giving multiple choices of social action of this type. However, it was recognised that what was to be tested for was social rather than personal morality. Accordingly it was hypothesised that it would be necessary for the test as administered to be altered in certain respects. These were as follows:

1. The attempt to simulate social pressures by 'fake responses' was to be omitted, partly because it was felt it would serve only to confuse the issue
- (15): Certain 'filler' situations were included in the original test: these did not involve moral issues.

where students not used to objective testing were concerned, and partly because, since the test was one of social choice in any case, it was possible to present choices dependent upon social conformity as straight choices within the instrument as set out.

2. It was decided to abandon the four-choice system, and instead to present the student with a spectrum of choices ranging from four to eight, depending on the nature of the situation, worded so as to show motive as well as action, ranging from purely unthinking class or cultural prejudice, through those based on desire for conformity or social esteem, and those based on emotional reaction, to those based on reasoned judgment. These would accordingly be scored on a spectrum, and to keep the test reasonably short, it was felt that twenty questions with choices scoring from 1 to 5 would suffice, the scoring depending upon the degree of rational social ethos shown in the motive chosen. At the level of reasoned thinking, choices capable of efficient realisation were to score above those which were ideal but impractical. (The reader is asked to examine the choices and scoring of questions C1 and C12 at Appendix V in the light of this comment). A longer instrument would have lengthened the test beyond the time over which co-operation could reasonably be

expected from colleges.

3. It follows from what has been said that the test would contain relatively few straightforward 'moral' problems. Most should be social, and some, political or cultural. The reader should examine C1, C4, C15, C19 and C20 in this light.
4. The material chosen for problems should be such as could reasonably be asked of students at the levels concerned, and should be related to the fields of study analysed in Chapter Four above.
5. The device of 'filler' questions should be removed, again on grounds of time limitations and over complication. All questions should score.

One possible objection to the form of test devised was foreseen: that the method of scoring was inviting the students to agree with the cultural standards of the tester, and penalising them when they failed to do so. It was however felt that this objection could be met on two grounds, first, that it can be demonstrated that most scores have in fact been assigned on the basis of freedom from sectional prejudice and of practical efficacy, and second that where the questions have been scored on the basis of conformity to cultural premisses (as, for example, in the question on voting (C1), where the highest mark is awarded to the motivation which corresponds to what is generally regarded as the social purpose of having a representative democratic system), the standards concerned are not those

of an individual but those which are held in general to be the desirable attitudes for this society, which it is the intention of social studies teaching to try and inculcate. Thus the extent to which a student exhibits them will in fact be a measure of the extent to which he has moved in the direction in which the teacher of social studies desires he should go, which is what we are trying to ascertain.

The final problem in the construction of the test was twofold: to what objective standards it should be geared, and whether it should be one test or two. In subjects for which there is a set course and syllabus, it is clear that the test is devised to measure the students' progress on that syllabus: but it is equally clear, since social studies teaching involves freedom of course construction and method of an almost unprecedented extent, that in this case this would not be possible. Similarly, the writing of a separate test for each class-course, or even each college, would raise problems of standardisation which would be near impossible to overcome, as well as calling for an impossibly large control group; and even then it was doubtful to what extent comparison between courses scored on different instruments could be regarded as valid, and one aim of the test was to discover if possible whether different methods of teaching practised with different courses were of significant effect upon subject efficiency. It was also impossible, because of this official policy of freedom of choice, as well as for logistic reasons,

to arrange for all classes under survey to be taught the same course, just as it was impossible in the event to arrange for the same class to have two different teachers at different stages in the session (a proposal which was made in order to reduce the personal factor: this was overcome by arranging as far as possible to have several classes taught by different staff but following the same method and assessing their results as a group). In any case, even had this been done, it would have meant that what was being tested was different from normal social studies teaching over any sizeable body of students in a respect upon which most of the organising bodies place great significance.

As far as the test of social attitudes and choices was concerned, it was realized that this diversity of courses did not matter: all the courses, in so far as they were aimed at changing attitudes, were aimed at inculcating the same things (see table, Chapter Three). It was in the test of cultural span that the problem was most acute.

At the time that the research for Chapter Four was being done, however, it became obvious to the author that a way existed out of the impasses which, although open to certain statistical objections, at least offered more hope than any so far considered. It was noted that the content of social studies teaching was capable of logical derivations from a coherent rationale, that of Garforth's book 'Education and Social Purpose'. It was further noted (see summary table

to Chapter Four) that the official Ministry, City & Guilds, and College suggestions corresponded very closely with this derived list of subjects. It therefore became at least theoretically possible to write a test of cultural span of the Richmond type using this list as the 'Establishment culture', and asking one or two key questions about each main area of study contained in it. This would have the following results:

1. the test as written would in fact be a test measuring the student's basic or key information against the ideal maximum range of such information which could be derived from a social studies course or courses. (Scoring on it might therefore be expected to be cumulative with course year, or broadly with student age. This will be considered later.)
2. The control group might be expected to exhibit a range of score such as could be picked up from general environment and school education alone.
3. The experimental group would therefore presumably exhibit the same overall range plus, if social studies teaching had any effect, a higher score in those sections which they had studied. If the test were scored with one final mark, and not, as in Richmond's original procedure, by sections, this would (assuming that there was any effect at all) give a higher overall score. Since the topics dealt with in any one course were, it was already known,

of approximately the same length, all students might be expected to deal with approximately the same number of topics in a session, and therefore, other things being equal (and this after all would be what the test was to determine), to enhance their score over the same proportion of the total number of questions, provided that the topics were given as nearly equal weight in the test as possible: further it was known that in practice certain topics tended to recur with many students, so the diversity would in practice probably not be as great as might have been thought. The fact that the individual questions on which scoring was enhanced were different, under these conditions, should not matter.

The statistical objection to which this method was open was that the differences in score between social studies and control groups, under these conditions, would tend to be lower than would ideally be desirable. It was felt, however, that no more suitable method of testing could be found, under the given circumstances, and that the lowered scores could be offset to some extent if, while retaining the normal values of significance for P of 0.05 and 0.01, results not reaching this region were admitted into discussion as meaningful but not significant - i.e., representing possible tendencies rather than definitely proven relationships - provided that P had

values not greater than 0.15. (16) The possible objection that the method adopted might tend to favour courses, or the college, with which the tester had himself been involved can be seen not to be valid, since the number of topics covered depends purely upon student rates of work and available class time, which between comparable levels of course is the same for all cases, provided student enrolment is random (i.e., students are not 'set' in respect of social studies and not streamed by overall ability within a particular group of courses being compared) and teaching hours (total course time) are the same or closely similar, both of which things are so. In addition, the test is comparing student performance with an ideal total span, not with any particular selection of topics from that span.

Thus, to sum up, the test as arranged has the advantage of comparing what is done with what it is desired should be done if possible, it does enable the many different courses to be assessed on one common basis, it does provide a basis for possible difference between experimental and control groups

(16): Professor Yamane, in 'Statistics - An Introductory Analysis', Harper, 1964, page 177, Sec. 8.3, 'Testing Hypotheses', points out that the classical analysis of the level of risk is for it to be regarded as a policy decision rather than as a statistical one. He also points out that random fluctuations in a sample may be reduced by increasing the size of the sample. The sample concerned was accordingly made as large as possible under the circumstances.

it is not readily open to any form of distortion of results by 'teaching to the test' (assuming anyone were unscrupulous enough to try and do so), it does measure an objective quantity - amount of information stored - and it is possible in part at least to overcome the difficulty occasioned by possible low differentials in scoring.

The other problem concerned the number of tests to be given. Originally, it was proposed that students should take two tests, one at the beginning of the session (before a social studies course, in the case of the experimental group) and another at the end, and the differences in score should be compared. Logistic problems over getting the tests to colleges and available college time were encountered here, however, plus the danger that the test administration might break down under the degree of collation involved. In addition, it was seen that the expected low differences in scoring between the two groups might well make the differences between differences, if this procedure were adopted, too low to be statistically meaningful, and there would again be great difficulty in standardising the level of the two tests. In any case, it was generally held by staff involved in the subject, that low student retentivity between years, particularly in the craft courses, would tend to make the safeguard of an initial test unnecessary, and that given a large enough sample, differences of score resulting from previous years' tuition (if any) would

tend to even out. In the event, therefore, it was decided to administer one test, at the end of the session, but to check the experimental scores among other things by student age, to ascertain whether there did appear to be any cumulative effect.

7.3 Methodology

The methodology of administering the test, finally, was therefore as follows. One battery of two tests, one of cultural span and the other of social attitudes (Part 'B' and Part 'C' respectively of the questionnaire appended at Appendix V in full), was drawn up, by the method described above. The factual content of the questions in Part 'B' was checked by reference to sources in the usual manner, and the selection of key questions was checked by consultation with other teaching staff engaged in social studies work, and by reference to social studies teaching material prepared at Gateshead Technical College by staff teaching the subject, on topics which were their special fields, for use by fellow staff to whom the topics were not familiar. The content of Part C was checked by reference back to associated factual topics in Part B in the manner described above. The total test, plus a short questionnaire in which the student had to check off educational and environmental details (Part 'A' at App. V) was then submitted for approval to Newcastle University Department of Education.

Colleges which had accepted the idea of a test in principle were then asked to submit a list of classes and numbers of students to whom social studies had been taught during the current session, with indication of the topics covered (as a check that approximately the same number had in fact been covered in each case) and methods used. Six of the ten colleges - Ashington, Darlington, Gateshead, Hebburn, Stookton/Billingham and West Hartlepool - replied giving this information. On the basis of this, a list of classes and student numbers was drawn up, so that each method concerned was represented as far as possible by at least one of each main type of course - Craft, Technicians, and O.N.C. The questionnaires were then sent out accordingly (it was felt more important to equalise the numbers by method than the numbers by college). Test instructions printed on the questionnaires advised the student to work straight through the questions, omitting any he could not answer, allowed him to guess, and suggested that he take about 20 minutes over each section. Persons administering the test were instructed to remind the student at the end of 40 minutes that he could proceed to Part 'C' if he wished: the entire questionnaire was designed to take approximately a one hour period to complete: in practice, students were reported as taking from 30 to 70 minutes. Part 'B' totalled 50 factual questions, scored 2 for a correct answer, and 0 for an incorrect answer, multiple underlining, or omission: Part 'C' totalled 20

choice questions, scored for an answer from 5 to 1 as described above and detailed in Appendix V, and scored 0 for a multiple underlining or an omission. An example of a multiple-choice question answered was given at the head of Part 'B'. A control group of 112 students was used, and the experimental group, after Ashington had withdrawn from lack of available time and certain classes had been rearranged at Darlington and Hebburn to allow for works visits, etc., totalled 384. Results were tabulated separately for each Part, by college, course, method, part-time/full-time, attitude to course (experimental group only), age, and educational and environmental background. χ^2 tests were then applied to the frequencies of tabulated scores, divided into cells, in respect of these factors, to attempt to discover whether any relationship existed between the scoring frequencies and the particular factor being tested. The results of these tests will now be discussed.

7.4 Results of the Questionnaire (17) Control Group

From the results obtained by Richmond and by Getzels and Jackson from their similar questionnaires of students, it was hypothesised that the scoring of the control group would be influenced by a number of educational and environmental factors

(17): Tables of distribution of scores and χ^2 values are given in full at Appendix VI₁₇ and are referred to in the following sections by number. For convenience, control and experimental tabular material is numbered separately, control tables being prefixed by the letter P (P1 to P13) and experimental tables by the letter Q (Q1 to Q24). In addition, suffix letters B and C are used to denote the test part being tabulated.

Accordingly, 13 X^2 analyses were run on the control results, in respect of various factors which will be discussed directly. The overall results, however, were seen to have two major characteristics. On the test of cultural span, scores tended overall to be low. Few students reached a score of more than 50% of the total, and the largest group of scores fell in the range of 20 - 39%. On the test of attitude, however, the reverse was true. Few students scored below 40% on this part, and the majority of scores occurred within the range 60-79%. This was found also to be true for the experimental group, and was therefore assumed to be basic to the nature of the test and marking. The low scores on Part 'B' were expected, and were felt to derive from the extensive field covered by the questions, as described in 7.2 above. It will be recalled that Richmond, with a similarly broad test of more academic material administered to University students and others obtained similarly low overall figures. The consistently high level of scoring on Part 'C' was however more unexpected and less easy to explain. It could be taken as evidence that young people, at least where social attitudes within their normal range of experience are concerned, are less prejudiced and more rational than superficial acquaintance with them, in the classroom or on the street, would lead one to believe: this would also explain the observed fact that scores on Part 'C' for the experimental group showed much less sensitivity to social studies teaching, overall and by college and method,

than sources on Part 'B' - after all, you will not alter a thing very much if it is already close to that which you are trying to make of it. On the other hand, it may well be that the answers and therefore the scores reflect what the person concerned would like to believe he would do in a given situation - or would like to have others believe he would do - rather than what he would actually do. There is considerable scope for further investigation in this field. One interesting fact which appeared to emerge from a study of individual scores, incidentally, was that, except in the very top and very bottom ranges, there did not seem to be any connection between level of scoring on the two parts of the test. This again was true both for the control and the experimental groups.

The first tests performed upon the control group were concerned with educational factors and with age. It was found (Pl) that the level of course a student was following had a significant connection with his score in Part 'B', technicians and O.N.C. students tending to score more highly than craft students, but that this did not affect his score on Part 'C'. Since the course in which a student is placed is determined partly by his past educational success and level of general intelligence, it was felt that this result might well reflect the better educational level achieved in general by technician and O.N.C. students, particularly since the score affected was a measurement of general information. Accordingly the students were now

analysed by school history (P3). Since it was found from Part 'A' that 88% of the control students left school at 15, the leaving age was not considered, and students were grouped entirely on the basis of whether they had obtained an external leaving certificate (not usually G.C.E.: the commonest was the Northern Counties School Leaving Certificate, followed in second place by the J1 technical examination of the same body) or not. The value for X^2 for P3B was of the same order of probability as that for P1B, as had been expected. Surprisingly, however, the value for P3C was 14.796, with 3 Degrees of Freedom, giving a probability of the order of 0.01. This did tend to suggest that social attitudes were indeed strongly influenced by school education: but if this were so, why did this not show up in P1C? The answer to this problem appears to be this: both cultural span and social attitude are indeed influenced by school education: but there are more students with a Leaving Certificate (which suggests a certain level of ability and, more important perhaps, of tone in the Secondary Modern School entering pupils for it) than pass into the higher grade courses. Given this superfluity of potential higher-grade students, actual selection for these courses, either by the college or by the employer, is based on the existence in the student of a certain level of technical information, or ability. Now, in the initial selection, when the student first leaves school, it is possible to see that this may be related to information acquired in school in general (the student who best acquires

technical information will, other things being equal, tend to be the student, interested in technology, who is best in general at acquiring information. Thus we are examining a superior information-gatherer within a group of his technical peers). But equally clearly there is no reason why selection on technical information should be related to any attitude characteristics at all, other than interest in technology and in information. This is in keeping with the general finding that scores on Part B and scores on Part C are not related. A similar result is found when the craft students in the control sample (the only ones to whom this is applicable) are grouped into Day-Release and Full-Time/Block Release. (P13). Figures for P13B are not significant, whereas for P13C they are significant, with a probability value in the area of 0.035. This again may be explained, when it is discovered that firms tend to offer block-release options to two main types of student: the higher-grade (technician) students, and, among the others, those students who show maturity of character and attitude such as to justify the belief that they are potential foreman material. The connection between this policy and the higher scores of Block Release students on Part C should be obvious. Finally, it is not in fact found that test scores increase with student age to any significant extent, but the score for cultural span (P2B) shows an increase with a probability rating of 0.1, which, while not significant, may perhaps suggest a tendency for older students to be inclined to score better than younger ones, presumably on the basis of

information gained through experience. There is no evidence whatever that social attitude scores improve with age over the range (15 to 21) concerned.

For the remaining analyses the students were grouped according to the answers given to those questions in Part 'A' concerning their environment and personal interests. Various of these factors were found not to affect the score, as far as could be determined from X^2 analyses of the grouped scores. These were: the student's father's occupation (P5), his religious beliefs (P8), whether or not his mother went out to work (P9), his journey time to and from work (P10), and whether or not the student possessed hobby or sport interests (P12). This is of interest in three respects: first, because Richmond's survey of more academic students suggested that scores of cultural span were sensitive to social class, while P5B appeared to suggest the opposite, second, because the results of P9C, P10C, and P12C appear to suggest that three of the factors which are widely regarded as influencing social behaviour (and hence presumably social attitudes) may be less influential, at least at the conscious level, than one might perhaps think, and third, because the results for P8C (which include figures on those students describing themselves as having no religion (over 40% of the total sample) give one considerable food for thought as to the extent to which denominational religion is at present an effective force in those areas of society to which our students belong. Of greater interest, however, are the four groupings which do

appear to affect scores.

The first of these is by home environment (type of house) (P4). The answers to the questionnaires were grouped into: Terrace houses (other than Council), council houses and flats, and private semi-detached and detached. Scores were grouped into two cells: above and below 35% (P4B) or 70% (P4C). Thus there were 2 Degrees of Freedom. The grouping was found not to affect P4C: but for P4B the value of X^2 was 5.793, the value for probability 0.5 (significance) being 5.991. Thus the observed value is so close to the region of significance that we may infer that there is a very definite possibility that home environment tends to be related to cultural span. It may well be that it was this, rather than the exact status of the students' parents, that affected the results quoted by Richmond. The exact nature of the effect is however interesting also. On the control distribution of results - and we shall see that, with certain modifications, the experimental group's distribution supports this - we find that, as expected, students living in council accommodation score below the null frequencies; but students living in private accommodation score only very slightly above the null frequencies, whereas students living in terraced houses - the old working-class areas - score very noticeably above the null frequencies. One possible explanation of this would seem to be that we have here a case where the apparently least privileged of the group, in this respect, tend to compensate

for their environment: but it is noticeable also that a fair proportion of technicians seem to come from these old working-class areas, possibly because of engineering tradition within the family (18), and this also may be a factor - perhaps more important - in explaining these scores.

The next results to be considered are those in which the students are grouped by sibling relations and by courtship. The sibling relationship results (P6B) for cultural span are not significant but do suggest that there tends to some extent to be a relationship between sib groupings and cultural span, only children and students from single-sex (male) sibling groups scoring better than students with sisters alone or brothers and sisters, at a level which would occur by chance alone only about 8% of the time. In the case of only children this could be due to the extent to which their home life throws them more than usually into contact with adults throughout their growing-up and in the case of children from single-sex sibling groups, because of competition with their peers. We shall see later that these results also are upheld, with modifications, for the experimental group tables Q16 and Q17. The grouping by courtship also exhibits a trend of about the same degree of probability, but this time affecting scores on social attitudes (P7C): this is of interest because of the hypothesis presented by a Durham lecturer that student interest in the outside world and desire to think about it and communicate it develop as a natural byproduct of the beginning of serious courtship (See Chapter Six) (18): From individual inspection of scored answers.

Unfortunately, however, the figures do not bear this out. P7B (cultural span) shows no significant relation between courtship and cultural span whatsoever; P7C suggests that a relationship between courtship and social attitudes may tend to exist, but it is the students who are not involved with the opposite sex that score better than expected, while all forms of sexual involvement - casual relations, steady courtship and marriage - correspond with lower than expected scores; and furthermore, a closer investigation involving both control and experimental groups, as we shall see in detail later, leads us to the conclusion that this effect is the result of a random fluctuation in this particular control group, and that in fact there is nothing linking courtship with either cultural span or social attitude, whether the student is taught social studies or not (Q13B, Q13C, Q14C).

Finally, an analysis was made of the distribution of scores when students were grouped by youth activities. (P11). This showed no significance for P11B, but P11C was significant, X^2 having a value of 7.963 with 3 Degrees of Freedom. Analysis of the experimental group (Q6) and comparison of the two groups (Q7) however suggested that this again was merely a random fluctuation. Its effect had been to suggest that students attending youth activities showed a lower score on social attitude than those not attending, which on the face of it did not seem very likely (although had it been confirmed by

the later analyses it could perhaps have suggested that those students - or a proportion of them - who do not attend youth organisations do not do so because they already are sufficiently mature not to need anything to lean on: but other work done on the effects of youth clubs would not seem to support this in any case.)

To sum up this first section of the findings, then, the control group scores were found to be definitely affected by the type of course (B), previous education (both), and whether or not they were block release students (C). There was also a tendency noted, though it did not reach the level of full significance, for scores on B (cultural span) to be affected by age, sibling relations, and home environment (type of house), or at least related to these. It appeared from initial control group analyses that scores on C (social attitudes) tended similarly to be affected by, or related to, communal youth activity and courtship, but a more detailed investigation (described below) suggested that these were in fact random fluctuations within that particular group. In all other respects for which tests were made the group's scoring was random.

7.5 Results of the Questionnaire: Experimental Group.

The main purpose of these tests (apart from checking on those environmental factors which had, or appeared to have, effects on control group scores (both significant and tentative) was to determine four things:

1. Whether social studies teaching had any demonstrable effect either on the entire group or on its components
2. What type of course produced the best results;
3. What teaching methods produced the best results, both overall and in respect of particular types of students; and
4. Whether the effectiveness of social studies teaching was affected by college atmosphere or student interest

The first analysis made was to check the experimental group scores overall against the control group. (Q1). For Q1B, it was found that the distribution of scores did show a scoring above the null frequency for higher level scores (over 35%) in respect of the experimental group, and a corresponding decrease in lower level scores; but the effect was by no means a significant one, the probability of its occurrence by chance alone being of the order of 0.15. The results for Q1C did not show any significant effect. In order to obtain a closer analysis of scores, craft and technician/O.N.C. students were next compared separately on the same basis (Q2 & Q3). Here, for craft students, no significant effect was found on scores of cultural span, but the distribution of scores on social attitudes was found to have a highly significant probability rating (of the order of 0.01). This significance, however, was adverse: that is, the experimental group showed scores very decidedly below the expected null frequency in the upper ranges. This result was, to say the least, surprising: at

first it was theorised that it might spring either from the selection of unsuitable teaching methods, or from the fact (referred to in Chapter Four above) that it is possible to criticise a large number of the craft schemes of work - in particular, those suggested by City and Guilds - as too academic in nature for the students for whom they are intended, and in some cases also too 'bitty'. This theory was abandoned however for two reasons: first, because the range of methods being used with craft students over the entire group was too wide for them all to be non-productive (see also Q20G and Q21C), and second, because a fair proportion of the students were being taught courses, that, as pointed out in Chapter Six, did not commit themselves to sticking closely to the City and Guilds suggestions. It was finally supposed that this result in fact reflected not the schemes and methods involved, but the type of student that was being taught social studies at this level. It has already been pointed out (Chapter Four) that a very odd feature of the City and Guilds schemes was that they were introduced initially into a comparatively low-grade group of craft classes, MECP, Fabrication of Steel, and so on, apparently simply because these particular courses happened to come up for revision at that time. This policy was criticised in Chapter Four as being more than a little haphazard: but it would now appear that it has had the following result. The students for whom social studies is compulsory are, at craft level, almost entirely composed of those classes at the

lower end of the general ability range. By contrast, those students for whom it is not compulsory, and from whom the craft control group was consequently drawn, are primarily to be found in those craft classes which demand the higher levels of intelligence, education, or technical skill: in particular, the electrical trades classes, from which the control group was primarily drawn. It is this unfortunate choice of classes for social studies teaching, it is now supposed, which may well be at the back of these rather unusual results.

For technicians and O.N.C. students, (Q3), neither test showed evidence of significantly being affected by social studies teaching. The number of technicians and O.N.C. students in the control group was however small, necessitating a rather crude split of results, and it was felt that this might mask results somewhat. Accordingly it was decided to investigate this matter further by comparing the results obtained within the experimental group by craft and technician/O.N.C. students (Q4). These were found to be highly significantly different (probability 0.01) for both tests. In each case, the probability of the technicians' higher scores over the craft students' was very much less - and the significance very much greater - than in the control sample (P1, Q4). A similar result, with greatly increased significance, was obtained by splitting the students into those who had left school without a qualification, those who had left at 15 with Northern

Counties and those who had left at 16 plus with either Northern Counties or G.C.E. (Q5B: test of cultural span). In addition, on this test analysis, the crossover point, at which students without qualifications began to score consistently lower than the expected null frequency, was raised from 30% to 35%, and the students with qualification showed a far greater consistency of higher scoring than they had in the control group. On the test of social attitudes (Q5C), the results were similar to those of the control group, except that in this case the value of X^2 obtained for Q5B exceeded that obtained for Q5C, whereas the value of P3C exceeded that for P3B. The order of probability for Q5C was however still lower than that for P3C, approximately 0.001 as against 0.0005.

As a result of these tests, it was felt that, while social studies teaching was not in itself a significant factor in affecting overall scores, it could be seen to reinforce the tendency of the better qualified and more intelligent students to score more highly, already discovered from the control group, to a considerable degree, with the additional interesting effect that this additive tendency was partially cancelled on scores of social attitude, due it was felt to an unfortunate choice of courses for the introduction of social studies teaching by City and Guilds.

In order to obtain information on the second point (the type of course best suited to social studies teaching), the experimental group scores were analysed according to whether the students concerned had attended block release or day release

courses (full-time or sandwich courses, because they involved continuous periods of training and a larger allocation of time per week, were considered along with block release). From the experience obtained in analysing the results by level of course, it was decided first to compare results within the social studies group, and only then to compare them with the control results. Craft students are analysed at Q8, and compared with the control group at Q9, and technicians and O.N.C. students (for whom a control split was not available) are analysed at Q10. The results for Q8B were not significant: but the distribution showed much less randomness than that for P13B, and the order of probability of obtaining these results was reasonably low, being in the area of 0.15. The results for Q8C (social attitudes) were just outside the region of significance, having a probability of approximately 6%. This lower level of significance could of course reflect the generally lower rate of scoring on tests of social attitude which has already been noted in the courses given social studies teaching, and discussed above. In each case, the tendency was for the full-time or block-release students to score better than the day release students. When the groups were analysed against their opposite numbers in the control group, for cultural span, however, it was found that neither the block-release nor the day-release student scores were affected at all by social studies teaching. It was therefore held that, for craft students, the type of course organisation could not be said to have any affect upon sources, the scores for Q8C showing the same basic type of distribution

as those for P13C, presumably due to the method of selection of craft students for block-release courses already described, and the greater non-randomness of the experimental results on B (still fairly well below the level of significance it should be remembered), presumably being due to the same selection showing up more clearly on B (which would be less affected by it) by reason of a larger sample being available.

The split between experimental group technician block-release students and experimental group technician day-release students is analysed in Q10. For Q10B, it was found that block-release students tended to score better than day-release students to an extent which was very close to the level of significance, having a probability rating of the order of 0.06. For Q10C however, the results of the split showed no significance at all. Although the result on the test of cultural span was below the significant level, it was close enough to it to make it at least worthwhile suggesting that, in this respect, technician/O.N.C. students might profit more from block-release than from day-release courses. Available non-statistical data, on greater time allocations available to social studies teaching on such courses, and on greater continuity of teaching, would also lead us to conclude this, given (as has already been shown) that social studies is generally more effective with technician and O.N.C. students than with craft students (P1B; Q4). Although no block release technician students were available for use in the

control sample, it will be remembered that the overall scores of technician students are higher than those of their craft counterparts, and are improved by social studies teaching, it would appear, still further. Also, no other B split of this type has shown this degree of non-randomness: it is over 2.5 times that of the craft student split at Q8B which was discussed above, and eventually rejected as an effect of social studies or block release teaching. The lack of significant result for Q10C suggests two things: first, the obvious one that this particular result (for social attitudes) is not affected by the type of course organisation either for technicians or for craft students; and second, that the remarks about selection for craft block-release courses, and the difference in inherent social attitude between craft students and technician students for whom social studies is compulsory (the largest proportion of students in the experimental group) (P4C) are further reinforced. It would appear from the analysis being considered that the majority of technician students show a level of social responsibility which is only shown clearly among craft students in those selected for block release. The method of selection for block release, as well as the greater selectivity of employers in recruiting potential apprentices, and of technical colleges in admitting them to training (as evinced by the proposals for 'setting' courses - G courses - in the 1961 White Paper, discussed in Chapter Three), would seem to make this entirely probable.

The final conclusions of this part of the analysis may therefore be summarised as follow: it would appear that, for craft students, no additional benefit is derived from organising their social studies teaching in a block release course. For technician and O.N.C. students, however, there may perhaps be some benefit, in term of a wider acquisition of knowledge of their surroundings, to be derived from the course being planned on a block release basis. As far as social attitudes are concerned, the systematic selection of potential foreman material for craft block release courses leads to these courses showing improved C scores in any case, but there is no evidence that social studies teaching further improves this.

The third question which it was attempted to answer from these analyses was whether an particular methods of teaching social studies had a significant effect upon scoring. In all, twelve approaches, involving combinations of up to three in each case of a total of seven methods of approach, were found to be in use within the Colleges which participated in the sampling experiment. These were as follow (the code letters used refer to the table of methods appended to Chapter Four):

1. B Student Research & Projects. Gateshead & Darlington.
3 sample cll.
 2. C Directed Discussion. Gateshead, Hebburn, Stockton.
3 s. cll.
- (D Extracurricular Activities only. Hebburn. not returned by college).

3. F Centifugal Scheme. Gateshead. 2 sample cll.
4. L Comprehension & Discussion. West Hartlepool. 2 sample cll.
5. G:B:H Discussion, Research & Visits, West Hartlepool. 2 sample cll.
6. L:I:C Comphn; Lectures & Discussion, Gateshead. 1 sample cll.
7. B:I:C Research, Lectures & Disc'n. Gateshead, Stockton. 3 sample cll.
8. I:C Lectures & Discussion. Gateshead, Ashington, Hebburn. 2 sample cll.
9. B:C Research & Discussions. Gateshead, Ashington, Hebburn. 4 sample cll.
10. B:I Lectures & Research. Gateshead. 2 sample cll.
11. I:C:G Lectures, Discussions & Outside Lecturers. Darlington. 1 sample cll.
12. B:F Centrifugally directed research. Stockton. 2 sample cll.

Of these methods, one (I:C:G) proved to be operated with a group of students too small to make satisfactory analytical material (this was the class already referred to which had to be rearranged as many students were away on work visits): all of the other eleven can however be compared overall for both B and C tests. As far as possible sample classes were chosen so as to provide samples for each method covering as evenly as possible the whole spectrum of student ability and type of

course. It will however be remembered that Ashington withdrew from the experiment on the grounds of lack of available time to administer the tests: classes intended to be sampled from that college have not been included in the list above.

In comparison within distinct student levels, however, the smaller numbers involved, plus the fact that most colleges made distinctions of method between the handling of technicians classes and the handling of O.N.C. classes, tended to narrow the field. In some cases this was due to the small total numbers involved: more frequently however, as is common in small samples, random fluctuations resulted in it being impossible to obtain a satisfactory split which could be used to provide data consistently on all classes. Thus it was only possible effectively to compare, for craft students alone, three methods for B and 5 for C, for technician students alone, six for B and two only for C, and for O.N.C. students alone, four, for B only. Clearly, if we are to obtain effective comparisons of the worth of the many different approaches being tried in this subject, more of this sort of comparison needs to be done, and with larger student groups. Nevertheless, what follows may stand as an initial pointer to further work than can usefully be done.

The overall comparisons of results by methods are shown at table Q20. It will be recalled that the test as originally framed was designed to measure the degree to which students approached the span of knowledge and type of attitude which

social studies teaching in general rather than any one particular course is intended to inculcate. On this basis, the results for both parts of the test show high overall significance, scores departing from the expected null frequencies on both sections of the test to an extent which has a probability of occurrence by chance alone considerably less than 0.001. Of these methods, only two - L:I:C and B:I - were attempted with only one class (a G course and a technicians course respectively all others being attempted with at least one craft class and at least one class either of technicians or of O.N.C. students, and where possible (methods B and C) with all three types of student. The only place where the results may be uncertain is in the bottom line of the B:F column of Q20C, where an assumed cell frequency has had to be used. The result on Q20C for B:F will therefore not be entered into discussion.

On tests of cultural span, all the methods involving a noticeable proportion of straight lecturing - that is, all those including the code letter I in the list above - checked out well below the expected null frequencies: in addition, F (centrifugally arranged courses) was slightly below the expected level, and B:C was definitely below, being in fact the least effective method tested. This is perhaps odd, since both B and C individually gave good results, C being in fact the most effective of the methods tested. L (Comprehension based work) and C:B:H were also above expected null frequencies. It is therefore possible that the poor results on B:C may be a random

fluctuation due to the particular classes concerned - although the fact that one of these was an A1 General Mining class at Hebburn would seem to make this a little unlikely. An alternative possibility might be that the organisation of this sort of course was rather too loose. Broadly speaking, however, it is possible to say that methods involving project research or directed discussion relate with significantly higher rates of scoring than methods involving formal lectures.

On tests of social attitude, much the same pattern emerges. Only one of the methods involving lecturing is above the expected null frequency in score, and that (B:I:C) also involves projects and discussions. B:C again does very badly, but this time I:C does badly also; both B and C score well above the expected null frequencies. Centrifugally arranged work (F) scores fairly well above the expected null frequency on this test, possibly because its arrangement makes the application of the material to the student's own environment and responses easier to grasp, and C:B:H for some reasons which is not very clear scores below the expected null frequency. Broadly, however, the same split into effective student-centred and non-effective formal methods would seem to hold good.

The examination of results by particular student groups is of course less comprehensive in nature, and in particular some of the methods which depart most noticeably from the expected frequencies have had to be omitted from the survey at this point. However, it will be seen from table Q21 that the

scores for craft students follow broadly the same pattern as the overall scores, with project and discussion methods coming out above the expected null frequencies on the higher scores, and methods involving lecturing coming out below them. For test B (cultural span) this difference is in the region of high significance; for test C the results are a good deal more inconclusive, but the probability of their occurrence by chance alone is only 0.15. Thus we may regard the method chosen as definitely affecting the craft students' scores on cultural span, and perhaps tending to affect their scores on social attitude.

By comparison, the results obtained with technician and O.N.C. students show much more resistance to method. The analysis of technicians' cultural span scores at table Q22 shows a broadly similar distribution to those we have already encountered, with higher scores being obtained when students are taught by project or discussion methods than when they are taught more formally: but the extent of departure from the expected null frequencies has dropped to a point where the probability rating is of the order of 0.13. Thus we can no longer say that the method used is definitely related to the score achieved, but only that there is perhaps evidence of a tendency for it to be so: and the results on the test of social attitudes are not in fact significant at all. This last result, however, should not be given too much weight, as the only two methods for which clear comparison figures

were available for this group were both poor-scoring methods on the overall analysis. Finally, the resistance to method of the scores rises for the highest level of student surveyed (O.N.C. at Q23B) to a point where the methods available have no significant effect at all. This result is one feels in keeping with the general educational principle that the more intelligent or higher level the student, the more he will tend to be self-directed in a learning situation, and the less he will be put off by poor methods, while the lower the level of student, the more he will tend to be distracted by difficulties, and the more important the choice of the correct method will become.

The final aim proposed for this part of the study (though not the final set of results to be discussed) was to determine whether scores - and hence presumably effectiveness of social studies, in its now defined role of an additive rather than a basic cause of high scoring - varied significantly with college or with student interest. Scores, grouped by colleges, were analysed for craft students at Q18 and for technician/O.N.C. students at Q19. Four colleges - Gateshead, Hebburn, Stockton and West Hartlepool - included craft classes in the sample. Of these, Gateshead scores were the lowest, being very definitely below the expected null frequency in the higher ranges on both parts of the test: Stockton was very slightly below the expected null frequency on B but very definitely above it on C: Hebburn was very definitely up on

both, its result on Q18B alone being almost at the 1% level on chance only, and West Hartlepool was also up on both tests, though less markedly so. The overall result was highly significant for Q18B: the result for Q18C gave a value for X^2 corresponding with a probability rating of about 0.15. Thus we may say that the effectiveness of social studies teaching as measured by the test of cultural span very definitely does vary with the college atmosphere and organisation, and its effectiveness as measured by the test of social attitudes may perhaps be inclined to do so also. It should be noted that these results bear out the subjective assessment of the colleges given in Chapter Six to a fair degree, and also appear to be independent of the level of class involved: Hebburn's very high scores on Q18B, in particular, were put up with a low-grade class - Fabrication of Steelwork.

Similar distributions were obtained when the scores of the higher grade students were analysed: here all five colleges were involved, Darlington coming out almost exactly on the expected null frequency for B and above it in the higher ranges for C. Here however, as might be expected from the generally higher scoring level and higher resistance of higher grade students, the results of the X^2 tests were depressed: the test for Q19B was still significant, but at a probability rating of 0.04 rather than 0.01 as in Q18B; the results for Q19C, although they showed the same basic distribution, did not approach the region of significance at all.

Thus we may broadly say that the college atmosphere and organisation are a significant factor in the scoring of all students on the tests of cultural span; but for the tests of social attitude it is only the craft students who appear even possibly affected. Once again, the higher grade classes tend to do well under more adverse circumstances than the lower grade ones, and are less sensitive to fortunate circumstances also, presumably again because they are inner-directed.

The other possible factor which was tested was student interest. This was classified under four heads: Nil, Little or Some (all recorded,) Definite Value (the specific value was usually recorded by the student in Part A), or Blank (where the student had recorded nothing, which presumably meant either that he had no opinion, had not understood the question - some students thought apparently that it referred to a previous course - or was 'playingsafe'). On both tests the degree of interest was found to be related, at a level of high significance, to the score distribution. Those students who felt the course had had a definite value for them scored significantly better in both parts of the test. It was of interest incidentally that these formed almost 40% of the total sample, despite the cries of lack of interest which were to be heard from teaching staff while the descriptive investigation was being made. One is led to wonder whether the teacher of this subject, because his own training is frequently in the arts and communication, does not perhaps over estimate the ability of

the average technical student to communicate interest in class, or even the extent to which interest is capable of absorbing him perhaps: the logical fallacy of thinking students to be constituted intellectually and emotionally in the same way as their educators has already been referred to, in Chapter Two. One last point of interest to be derived from this table, also, is that the lowest scoring frequencies in the test of social attitude were made by the students who had no interest, as one might expect: but in the test of cultural span, they were made by the students who had left the entry blank in Part A: lack of attitude, in this section, seems to be worse than a definite but wrong attitude.

Finally, the experimental group results were used to check the validity of certain results already obtained from the control group on environmental factors. These have already been referred to in 7.4 above, but it is necessary briefly to record what was found. The increase of score in the tests with age which was noted for the control group was also found with the experimental group, but this time the significance for tests of cultural span was much higher - almost thirty times that of the normal group, and for the first time the score on social attitudes approached the significant level, X^2 having a probability rating of 0.08. It could thus be said that the tendency for scores to improve with age did indeed obtain, but that there was no evidence, from further tests comparing the maximum age-groups of the experimental and control students, to

suggest that these higher levels of significance were the result of some cumulative effect in social studies teaching as far as scores on social attitude were concerned. There was a slight possibility however that the increase of significance for the test of cultural span might be due to a cumulative teaching effect, as the comparison of maximum age-group experimental and control students gave the experimental students a higher score to an extent which had a probability rating of 0.12. (Q11 and Q12).

In the tests of students scores grouped by youth activities (Q6), the control and social studies results on Part B agreed closely: if anything, the social studies results were more random than the results with the control group. In Part C of the test, the layout of the distribution of results resembled that of the control group, but the results were not significant, P having a value of about 0.18. This lack of significance could have been due either to social studies teaching improving the scores of the weaker students (which did not seem likely, as all previous evidence collected suggested that it assisted primarily those students who were already likely to score well anyway), or a truer reading obtained from the larger group, in which case the significance in the control group would be a false one due to random fluctuation. In order to test whether the score was due to the influence of social studies teaching, the weaker group - the students who attended youth organisations - from each group was compared.

The results of this comparison (Q7C) were not significant, and it was therefore postulated that the significance of the results of P11C was a false one due to random fluctuation within the control group.

The control group, it will be recalled, showed a very odd distribution on the test of social attitude in respect of courtship, in that students who were not courting scored better than those who were, to a degree which would occur by chance alone only about 8% of the time, contrary to the theory of the Lecturer in Liberal Education at Durham Technical College, who had suggested that courtship was accompanied by a spontaneous increase in the student's awareness of the world around him and his desire to communicate it. It was felt that this result could well be tested further by examining the scores of the experimental group on this. The tables giving the results of this are reproduced at Q13. The results of Q13B confirm that the distribution of scores on the test of cultural span have no significant relationship with the student's courtship activities: and on Q13C the results, while distributed similarly to those of the control group for students not courting and those engaging in casual relationships, are very different for those students with wives or steady girlfriends, the overall result no longer approaching anywhere near the region of significance.

This alteration of the findings could be due to either of two things:

- (a) that attitudes at least are influenced by social studies teaching among students courting seriously, cancelling out their otherwise poor score (while not the same thesis as proposed by the Lecturer in Liberal Education Durham Technical College, this could point to courtship and social studies teaching together being connected with an increase in score).
- or (b) that this result, obtained with a larger group, is the normal one, and the control group result a random fluctuation due to the small size of the group. In this case, the hypothesis referred to above would be completely disproved, and social studies teaching would also not affect the score.

In order to test which of these two possibilities is in fact more correct, the 'Steady/Married' students, who should show a significant difference in score distribution if the ~~changer~~ results are due to the effect of social studies, were compared for the two groups (Q14C). No clear trend was visible, and the value of X^2 did not approach anywhere near the level of significance. It was consequently concluded that the experimental group's lack of significance was in fact the normal result, and the approach to significance of the control group result due again to random fluctuation.

Finally, tables Q15, Q16 and Q17 were used to check the results on home environment and sibling relations. The distribution for Q15B was found to be similar to the distri-

bution by home environment recorded for the control group for P4B, but the value of X^2 no longer approached significance. This upon closer analysis was found to be due mainly to a much more evenly distributed score on the part of students living in council houses. Again it was possible that this could either be due to teaching improving the scores of cultural span, or to a larger sample, and the council house students from both groups were accordingly compared. The scores were found to differ significantly, the social studies students scoring well above expected null frequency in the higher ranges. It was therefore concluded that the original control results were valid, and that social studies teaching did have an observable moderating effect upon the scores of this group of students. A similar result was recorded in the case of sibling relations. The result for these was checked for cultural span in Q16B, and it was found that the control distribution was entirely wiped out, and the new result not significant. To establish whether this change of pattern was due to the poorer scoring groups being improved in score distribution by social studies teaching, or whether this pattern was the more correct one, each group was compared independently for control and experimental students. It was found that there was indeed a significant improvement in the scoring of experimental group students for the two groups - students with sisters only and students with brothers and sisters - which had tended to score badly in the

control sample. It was therefore concluded that the original control group pattern was indeed a valid one, and that the changes in the experimental group were in fact due to the effect of social studies teaching upon the poorer scoring students in improving their level of score. It should incidentally be noted that these two environmental factors are the only cases where social studies teaching appears to have fulfilled its original intention of improving the education of the less well-educated student.

7.6 General Conclusions.

From the material presented in this Chapter, the following general conclusions may be drawn:

1. That social studies teaching and its effectiveness are amenable to objective tests of information span and attitude, despite the diversity of courses involved.
2. That such tests will yield statistically meaningful information, provided the student sample is large enough.
3. That students' progress in the direction of the results being measured is influenced by course level, previous education, and course organisation, and appears likely in addition to be influenced by age, home environment, and sibling relationships.
4. That the theory of the Lecturer in Liberal Education, Durham Technical College, that student awareness and

- attitudes are influenced favourably by the onset of serious courtship is not upheld however.
5. That in general information about society is considerably more sensitive to influence than social attitude.
 6. That social studies teaching does not in itself significantly affect scores, but that it appears in the main to act as an additive factor, improving the scoring of those groups which score well initially, in particular technicians and O.N.C. students, older students, and students with a good school education: that is, students who were more successful at school or who are further away from school.
 7. That in particular social studies does not have the success with craft students that its promoters hoped it would have, and that this is at least partly due to an unfortunate choice of craft courses for inclusion of the subject by City and Guilds.
 8. That the factors of home environment and sibling relations are exceptions to this, in so far as social studies teaching would here appear to improve the scores of the weaker groups of students.
 9. That scores in the tests are generally sensitive to the teaching methods employed, project research and directed discussions (the two methods least like school education, in the main) in general producing

better results than formal teaching, but that the method of organisation by centrifugal arrangement, proposed for theoretical reasons in earlier chapters shows results that are inconclusive, while the sensitivity of results decreases markedly among the higher levels of student.

10. That the effectiveness of social studies teaching is significantly influenced by college atmosphere and organisation, and also by student interest.

It should however be stressed that several of these results are by nature highly tentative, and that the whole field is open to further investigation.

7.7 Final Summing-Up.

Thus, with the conclusions to the seventh, and last chapter, we reach the end of our analysis of the teaching in technical colleges dealing with students up to O.N.C. level of the subject known variously as social, general, or liberal studies. We have shown that the subject is in fact a modification and adaptation of old traditional liberal education concepts to meet the demands of a modern technological society. We have shown that it originated in a rethinking of these concepts following the discoveries in educational psychology, and the realisation of the implications of technological urban mass democracy, during the 1920s and after, culminating in the statements of the Spens Report. We have shown that its application in practice stems from the 1944 Education Act, and

that following that Act it went through four phases of growing institutionalisation, particularly since it became the subject of a political programme, but that a liberal (in the old sense) element was re-injected into it by the findings of the Crowther Report of 1959. We have shown that its official objective is the production of a well-rounded individual who is also a free citizen type, and that a rationale of material and method may be derived from this objective to which official policy remains reasonably close.

In our analysis of the actual teaching of the subject in a given area, we have seen that the objectives, material and methods of the national official bodies - the City and Guilds and the Department of Education and Science - are also broadly those of individual colleges and local authorities, but that the effectiveness of the local authorities depends on a number of cultural factors - size, wealth, cultural history, and so on, while the existence of a coherent policy at the college level depends to a very large extent not only on the existence of clear L.E.A. policy and directives, an unusual state of affairs in local education, but also upon the appointment of suitable staff of the correct status to be regarded as equals by staff in other departments, and on the individual contributions they can make to the college.

Finally we have demonstrated that it is possible to measure the effectiveness of social studies teaching against its desired objectives and have begun to list some of the

information which may be derived from such measurements. This has been summarised in the last section, but one final point remains to be made from it. The original purpose of setting up the objective analysis was to try to determine to what extent social studies as at present constituted and taught at this level measures up to the aims and purposes claimed for it by those who introduced it into technical education. These aims are noble, and the tradition of which it is the latest flowering is essentially good. It is therefore all the more pity that we have to record that, on the information furnished by the tests given above, and if these tests are indeed correct, it does not, in the majority of cases, really meet them.

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Instrument Production Craft Practice, 1965, 1966 & 1967.

Instrument Production Technician's Certificate, 1965 Scheme.

Plumbers' Work (& related subjects), 1965 Scheme.

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APPENDIX I: LETTERS FROM OFFICIAL BODIES

Department of Education and Science.

City & Guilds of London Institute.

Local Education Authorities.

Dr. Chapman, Hatfield College of Technology.

463.

Department of Education and Science

Curzon Street, London W.1.

Our Ref: T.555/3321c

15th October, 1964.

Dear Sir,

I am sorry you have not had an earlier reply to your letter of 28th August, but it has been necessary to search the Department's records and to make other enquiries.

The White Paper of 1956 on Technical Education stressed the importance of liberal education in technical studies and this was further emphasised in the Report of the National Advisory Council on Education for Industry and Commerce.

The problem of how this necessary broadening of the treatment and content of sandwich and full-time courses was discussed at various meetings and one of H.M. Inspectors' of Schools prepared a memorandum for the then Minister on this subject. After consultation with the National Council for Technological Awards, the National Advisory Council and the teaching associations, the memorandum subsequently issued in the form of Circular 323 as an indication of Ministry policy.

I trust that this information is what you require for your studies.

Yours faithfully,

(Signed) H.J. Lester.

C.C. Hebron, Esq.,

49 Northdene, Birtley.

CITY AND GUILDS OF LONDON INSTITUTE

76 Portland Place, London W.1.

T/193/19(F1)

1st May, 1964.

Dear Sir,

Thank you for your letter of the 8th April regarding Social Studies in Technical Colleges. I apologise for the tardiness of my reply which is entirely due to having been absent from the office for long periods during a series of local examiners' meetings.

At this stage I think it better to append a list of the Institute's schemes in which Social Studies are a compulsory requirement. This involves getting into touch with a number of my colleagues who will give me the information in respect of their own subjects. I would then suggest that you write to the Institute's Sales Department and order any or all of these if you wish to obtain copies although in a number of cases, you will find that the references are similar and the philosophy the same.

With regard to the aims and objectives of social studies, I think I cannot do better than refer you to some notes which were included in an earlier edition of the Mechanical Engineering Craft Practice syllabus and I append a copy of this. In the present issue of the pamphlet, teachers responsible for general studies are recommended to refer to the Ministry of Education pamphlet published in July, 1962 on "General Studies

in Technical Colleges". You are probably familiar with this pamphlet which is available from H.M.S.O. at 2/-d.

As you will see from a study of the Institute's requirements, it is not the Institute's practice to assess courses run in Technical Colleges although we have followed with interest the information both of courses and examinations which have been carried out. As you can imagine, there is a wide divergence of treatment of such studies and we still find that a large proportion of colleges set conventional type examinations which even bear quite a remarkable resemblance to a G.C.E. ordinary level English examination. The numbers of these are dwindling.

The Institute does not have a social studies panel as such. The decision to incorporate social studies in mechanical engineering syllabuses was made as a result of advisory committee discussions and the suggestions made for topics and examples were the result very largely of committee discussions. I would, however, be quite happy to prepare some material extracted from various syllabuses and examinations from colleges all over the country if you care to suggest a date for a visit later on in the summer.

Yours faithfully,

Signed (Mrs. W.D. Gray)

for Director.

C.C. Hebron, Esq.,
49 Northdene, Birtley.

Encls:
WDG'MFS

SOCIAL STUDIES

The Institute is anxious that students who pass through the course should be broadly educated and that their outlook should not be restricted to the confines of their technical and craft training.

For this reason the social studies have been included in the scheme. The syllabuses for social studies which follow are provided more as a guide than obligatory requirements and are given in the form of topics and examples. It is recognised that Colleges may wish to introduce different examples and will vary in their methods of treatment and they will therefore have complete freedom in their manner of presentation. For this reason, the examination of candidates will not be conducted by the Institute.

The teaching of English is intended, though it is hoped that the subject will not be treated in a formal manner, but rather that the student may be taught the convenience of expressing himself through language both oral and written, i.e., using it as a "tool". Some topics, such as hobbies and leisure activities can conveniently be used for "lecturette" periods with this object in view, followed by informal discussions in the early part of the course. More formal debates, which can follow progressively, should be prepared by principal speakers. Written homework should be encouraged as examination practice, but should generally be confined to

topics in which the student is likely to have a keen interest, such as either his hobby or his job. If possible organised visits of observation can with advantage be undertaken; these should range over as wide a variety as possible including local industry, local services, local history and government, places of historic and architectural interest.

It will be realised that, in the short time available, most subjects can be treated in outline only. It may therefore be found convenient to choose outstanding events as examples, especially in the field of history, inventions, discovery etc., rather than attempts at continuous narrative. The student should at all times be encouraged to appreciate that these topics have a direct relationship to his work and all other aspects of his life, including eventually, that of becoming a responsibly-minded adult.

Colleges will be required to set their own examinations at the end of the second and fourth years, and the Institute may call for records of class work and examination results.

CITY AND GUILDS OF LONDON INSTITUTE

76 Portland Place, London W.1.

13th May, 1964.

Dear Mr. Hebron,

Thank you for your further letter of the 9th May. By all means come down on Friday, 24th July by which time I will try to have some material available in time for your visit.

With regard to the specific questions in the last paragraph of your letter, social studies were first introduced by this Institute into the scheme in Mechanical Engineering Craft Practice which was published in 1957. In fact, we are rather proud of having this scheme published and printed several months before the publication of the famous circular 323 from the Ministry of Education. We are pretty certain, therefore, that we can claim to be the pioneers, although quite clearly this kind of thing was being done voluntarily quite extensively before it was put into any scheme as an examination requirement.

Secondly, we have always expected that our reference to broad education would be interpreted as art in the broad sense as you suggest including items such as criticisms of books, films, etc., and the topics and examples listed were simply given as examples of the kind of syllabus items which we expected that colleges would adopt for this purpose. We also expected that local interests would be applied especially

in areas where local history had special significance.

However, I am sure we can discuss this when you come down.

Yours sincerely,

(Signed) W.D. Gray (Mrs.)

C.C. Hebron, Esq.,

49 Northdeneq

Birtley.

WDG'MFS

CITY AND GUILDS OF LONDON INSTITUTE

76 Portland Place, London W.1.

T/193/19(F1)

2nd October, 1964.

Dear Mr. Hebron,

I am sorry you have been kept waiting such a long time for a reply to your letter of the 28th of August. We are now in the throes of numerous changes within the Institute, one of which results in my no longer being responsible for the Engineering Subjects. I have also been on holiday during the latter half of September.

Your letter seems to contain two quite specific questions, both of which can be answered quite easily. First of all, the inclusion of a scheme of compulsory social studies into the Institute's Craft Practice Course in 1957. We learned afterwards that discussions had been taking place within the Ministry regarding social study, but we have always rather proudly boasted that our own publication appeared six months in advance of the famous Circular 323. We can, therefore, quite legitimately claim to be the pioneers in this field.

The other question concerns the Crowther Report. It is quite true that City and Guilds' views and evidence are frequently mentioned and if you will refer to page 479 of volume 1 of the report, you will see that representatives of the Institute who gave evidence were Major General C. Lloyd, Mr. B.C. Lucia and Mr. D.E. Wheatley.

With kind regards,

Yours sincerely,

C.C. Hebron, Esq.,

(Signed) W.H. Gray (Mrs)

COUNTY OF NORTHUMBERLAND

EDUCATION COMMITTEE

COUNTY HALL;

NEWCASTLE UPON TYNE, 1.

JW/BN

18th September, 1964.

Social Studies in Technical Colleges.

Dear Sir,

In reply to your enquiry of 12th September, this Education Authority has not laid down any set policy for the teaching of Social Studies in Colleges of Further Education. This has not proved necessary as the principals of the two technical colleges in the County are well aware of the importance of the subject and have ensured that it should be included in syllabuses wherever this has been practicable. At the County Technical College, Ashington, Social Studies in one form or another play an important part in full-time and part-time courses for apprentices, craftsmen, technicians, etc. and the more recently opened South-East Northumberland Technical College has appointed two Assistant Lecturers for Social Studies to commence duty in the current term.

It has not been necessary so far to provide special buildings for Social Studies teaching nor has any special equipment been found necessary to date. If this should prove to be desirable in future, the Authority would no doubt give sympathetic consideration to the provision of equipment

and they are keeping in mind the need for the inclusion of provision for Social Studies in planning possible new building developments at the South-East Northumberland Technical College. These developments, however have not yet received the approval of the Department of Education and Science, so that it would be premature to say any more than this at the present time.

With regard to the objectives of Social Studies teaching, the Authority sees this as necessary to balance the purely vocational and technical element in a course of further education, and they regard it as their duty to ensure that young people attending Further Education courses are made aware of their rights and responsibilities as citizens and of developments in the world as a whole of which they might otherwise not have been made aware.

Yours faithfully,

(Signed) C.L. Mellowes.

Director of Education.

C.C. Hebron, Esq.,

49 Northdene,

Birtley.

COUNTY OF NORTHUMBERLAND
EDUCATION COMMITTEE

COUNTY HALL,

NEWCASTLE UPON TYNE, 1.

JW/BN

19th January, 1965.

Social Studies in Technical Colleges.

Dear Sir,

In reply to your letter of 5th January, the answers to your questions are as follows:-

1. (a) The Authority has no set policy about the teaching of Social Studies; considerable scope is given to the Principals of technical colleges in planning courses, and the Principals of both technical colleges in the County are fully aware of the usefulness of Social Studies and are actively promoting them.

(b) No Special buildings have been provided for this purpose to date, but it is hoped to include special provision for Social Studies in additional premises which the Authority hope to erect at the South-East Northumberland Technical College if approval is obtained from the Department of Education and Science in the Building Programme. An area of 1,500 square feet has been included in the schedule of accommodation for various work, including experimental work in this subject. It has not so far proved necessary to provide special equipment for Social Studies as the normal college equipment has proved sufficient for the purposes of Social Studies teaching.

With regard to staff, two Assistant Lecturers were recently appointed to the staff of the South-East Northumberland Technical College to teach Social Studies. It is expected that as the number of students at the College increases, it may prove necessary to increase the staff, but at present the work is at a fairly early stage in this College and there will be a good deal of consolidation to be done.

2. Not applicable.
3. Not applicable.
4. The Authority considers that the main objects of Social Studies should be to enable students to understand the economic and sociological implements of their own jobs. It is also thought that the improvement of the standard of English and of communications generally should come within the purview of Social Studies. All part-time students at the College receive at least one hour's teaching per week; full time students have between two and three hours and in some cases as much as four hours per week. It is thought that the growing tendency towards block release courses will enable more concentrated work to be carried on in this subject.
5. (a) No.
(b) No.

Yours faithfully,

(Signed) C.L. Mellows.

C.C. Hebron, Esq.,
49 North dene.

Director of Education.

COUNTY BOROUGH OF DARLINGTON

Education Department,
North Lodge,
Darlington.

18th September, 1964.

Dear Mr. Hebron,

Thank you for your letter received to-day. In reply to your specific questions:-

1. (a) Every encouragement given. Variety and experiment welcomed.
- (b) Liberal Studies Department created on equal terms with other Departments. All reasonable requisitions for equipment are met and staffing requirements are established on the same terms as those of other Departments. A new Arts Centre is planned as part of the new College and it is anticipated that this will lead to an extension of liberal studies.
2. The Department was set up about three years ago. Policy is continually under review but no significant changes have been made.
3. The initiative was taken by the Authority, but undoubtedly influenced by current interest in liberalising technical education.
4. This provision aims at improving the quality of general education, fitting people for citizenship, encouraging interest in cultural matters and tempering the emphasis

on formal academic and practical achievement in technical education.

5. No.

These answers are brief and if you would like to visit this Office and talk over the matter with my Deputy, Mr. C.J. Ross, he will be happy to give you some detail and to answer any other questions which you have.

In case you have not already received one I am enclosing a copy of the Prospectus for the Liberal Studies Department at the College which may clarify a few points for you.

Yours sincerely,

Chief Education Officer.

C.C. Hebron, Esq.,
49 Northdene,
Birtley.

COUNTY BOROUGH OF DARLINGTON

Education Department,

North Lodge,

Darlington

27th October, 1964.

Dear Mr. Hebron,

Thank you for your letter received on the 22nd October, 1964. Darlington took over complete responsibility for the College of Further Education during the first world war. For the previous twenty years it had been a joint responsibility of the Borough and the County.

Please let me know whether there is any further information you require.

Yours sincerely,

Chief Education Officer.

C.C. Hebron, Esq.,

49 Northdene,

Birtley.

COUNTY BOROUGH OF SOUTH SHIELDS

Education Office,
Westoe Village,
South Shields.

18th September, 1964.

Dear Sir,

Thank you for your letter of 12th September, 1964 enquiring about the teaching of Social Studies in Technical Colleges in the North East.

I see from your letter that you have already established contact with the Principal of the South Shields Marine and Technical College. As we have only the one Technical College provided and administered by this Education Authority, I think that I should be able to add very little to whatever the Principal sends you.

Yours faithfully,

Director of Education.

C.C. Hebron, Esq.,
49 Northdene,
Birtley.

COUNTY BOROUGH OF GATESHEAD

Education Committee

Education Offices,

Prince Consort Road S.,,

Gateshead, 8.

21st September, 1964.

Dear Sir,

I beg to acknowledge receipt of your letter of 12th September.

I am not quite sure what is included in the term "Social Studies" so far as your thesis is concerned, particularly as you state that you are also concerned with operative, craft and technicians' courses. It would be true to say, however, that the Authority has never expressed any views on this particular type of course and the matter is entirely within the discretion of the Principal of the College, subject to the usual limitations concerning adequate numbers of students, etc.

Yours faithfully,

Director of Education.

C.C. Hebron, Esq.,

49 Northdene,

Birtley.

COUNTY BOROUGH OF SUNDERLAND

Education Offices,
15, John Street,
Sunderland.

6th October, 1964.

Dear Sir,

Thank you for your letter of the 12th September 1964.

I am not clear on the connotation of the term "Social Studies" as used in your letter. There are no courses in this area leading to a recognised qualification in Social Science but Liberal Studies or General Studies are an integral part of most of the technical and commercial courses which are held in the Sunderland Technical College and the West Park College of Further Education. If this is the field in which you are interested, I suggest you approach the two Principals concerned for information.

Yours faithfully,

Director of Education.

Mr. C.C. Hebron,
49 Northdene,
Birtley.

COUNTY BOROUGH OF WEST HARTLEPOOL

Education Offices,
Park Road,
West Hartlepool.

5th February, 1965.

Dear Sir,

Thank you for your letter dated 5th January, 1965 in which you enquire about material for a thesis you are writing for the M.Ed. degree of Durham University on the teaching of Social Studies in Technical Colleges in the North East.

I set out below the answers to the questionnaire which you included in your letter:-

1. (a) The Authority has not formulated any specific policy for the introduction or the teaching of Social Studies at the West Hartlepool College of Further Education. The development of these studies at the College has largely been determined by examination requirements of such bodies as the City and Guilds of London Institute and the Northern Counties Technical Examinations Council and also of the Ordinary National Certificate Courses in Mechanical Engineering.

1. (b) There is no special provision of buildings, equipment and staff in the College. However, the Principal is at present considering the possibility of having a room in Phase II of the new College which will be used for Social Studies.

I should point out that Phase I of the College was opened at the beginning of September, 1964 and it houses the Building,

Engineering Science Departments. Phase II will consist of the Commerce Department and building will commence later this year. Some items of equipment including Tape Recorder, a Record Player, a Television set, an Epidiascope and a Film Projector which could be used in Social Studies courses are already available for general College use.

2. Already partly answered in 1.(a). The teaching of Social Studies originated in the College in September, 1960 when the City and Guilds of London Institute and the Northern Counties Technical Examinations Council introduced Social Studies into some of their courses. No significant changes have occurred since this date.

3. Already answered.

4. The main objectives of this kind of educational provision may be summarised as follows:-

- (a) The students should be able to communicate better in speech and writing.
- (b) It should broaden their interests and outlook.
- (c) It should help to counteract over-specialisation.
- (d) It should help to make the pupils capable of thinking for themselves.
- (e) It should provide the pupils with a knowledge of current affairs.

4. (a) No.

(b) No.

I enclose a copy of the College of Further Education Prospectus for the 1964/65 Session and you will note that Social Studies are referred to on pages 28, 29, 32 and 33. I hope that these answers will be of some assistance to you.

Yours faithfully,

Chief Education Officer.

Mr. C.C. Hebron,
49 Northdene,
Birtley.

CITY AND COUNTY OF NEWCASTLE UPON TYNE EDUCATION COMMITTEE

F.43/5

City Education Dept.,
Civic Centre,
Barras Bridge,
Newcastle upon Tyne, 1.

18th February, 1965.

Dear Sir,

With reference to your letter of 21st January 1965, I find it difficult to answer each of your questions specifically. I think it would be true to say that the Education Committee have encouraged the introduction of Liberal Studies into further education courses, but the initiative in this connection comes first from the individual colleges. The Committee have been prepared to provide any necessary furniture, equipment and teaching staff as a result of the introduction of Liberal Studies.

I am sorry that the answers to your questions are somewhat brief, but I hope that they will be of some assistance to you.

Yours faithfully,

(Signed) H.V. Lightfoot.

C.C. Hebron, Esq.,

49 Northdene,

Birtley.

HERTFORDSHIRE COUNTY COUNCIL
Hatfield College of Technology,
Hatfield, Herts

1st September, 1964.

Dear Mr. Hebron,

In reply to your letter of the 28th August, the decision to introduce Social Studies into the curriculum of this College when it opened in 1952, arose entirely on a recommendation which I made to the Governing body at that time.

For many years previously, and particularly during the time I was planning the programme for the College it was obvious to me that great benefit would accrue by introducing this measure, and when I suggested it to the Governors, they immediately agreed. As it was operated at that time and, indeed, ever since, every student in the College, has about 10% of his time given over to this form of study. In the early days we experienced resistance from the students, some of their employers and even from some of the teachers of engineering, but gradually everyone has been impressed with the benefits and the principle is now accepted by all.

If there are any other points on which you would like help or advice, perhaps you will let me know and I will put you in touch with the staff who are concerned with Social Studies.

Yours sincerely,

(Signed) Dr. W. A. J. Chapman.

APPENDIX II

The Text of Questions for a Prepared Interview
with City and Guilds of London Institute, 24.July.1964,
together with transcript answers.

(The answers to these questions are summaries of the verbal replies given, and were checked with Mrs. Gray of C.G.L.I. for authenticity).

- Q.1. Why was it decided to start Social Studies in the MECP syllabus, considering the low-grade quality of the student material?
- A. Mrs. Gray, herself a Social Scientist, and Dr, Chapman of Hatfield wanted to get Social Studies started in 1957. As Engineering courses were then being revised, opportunity was taken to introduce the subject into the new MECP course.
- Q.2. I understand that some Colleges still do Technical English with Building Crafts students, and others still omit non-technical studies entirely with MECP.
- (a) How is it that this situation is allowed to continue
- (b) What action, if any, is proposed about it?
- A. In the case of the Building Crafts syllabus, an 'escape clause' exists. In other cases, this situation can only come about through lack of integrity on the part of College Principals, and, if discovered, the students would be disqualified from their technical examinations.

Q.3. Is it intended to include Social Studies as a City and Guilds 'requirement' in other courses? Which, if so? will there be detailed notes, a rough scheme, or reference to the Ministry Pamphlet?

A. Yes, it will eventually be included in all courses. Reference will probably be to the Ministry Pamphlet, with the birth of which City and Guilds were associated.

Q,4, (a) The Building Crafts notes are generally regarded by teachers as being very good ones. Are any similar notes to be included in other courses?

(b) To what extent are they perhaps 'too good', requiring too much from teacher and students?

(c) To what extent are they in fact not used as they stand, by colleges?

A. The notes are intended for guidance of teachers (see Intro)., and similar expansions on social studies in other courses may follow. They are 'adequate and flexible'. Teachers have freedom to depart from them in any case.

Q.5. (a) Is it intended to revise the MECP notes?

(b) If so, what main forms will this take?

(c) Certain sections of these and the MET notes appear repetitive. Are there any special reasons for this, or is it accidental?

A. (a) and (b): Revision is not intended in the immediate future.

(c) The escape clause is designed to allow for, and expects, stupid repetitions to be avoided: seeing that this is done is a College function. But the re-examination of a topic for a different basic purpose at a different point in the course may be a very good thing.

Q.6. To what extent are notes like those for Building Crafts designed partly to educate the teacher? What is the City and Guilds' opinion of craft teachers teaching social studies?

A. It is expected that the teaching of these subjects will be beneficial to teacher and student alike. Using craft teachers is highly desirable wherever possible. An Academic/Engineering 'split' is most undesirable.

Q.7. How important is training in expression in relation to the other aims?

A. VERY - for examination purposes as well as others.

Q.8. (a) To what extent in practice do Colleges tend to treat the very general outlines of the MET, Gas, and FS notes as 'syllabuses'?

(b) What is the City & Guilds attitude to departures from these notes?

(c) What is the City and Guilds attitude to departures from the MECP or C. & J. notes?

(d) What is the attitude towards MECP and MET working the same syllabus?

A. (a) No information.

(b) and (c) The City & Guilds doesn't mind at all. In fact experiment is welcomed.

(d) This is o.k. as long as it is workable. Over-segregation is a bad thing.

Q.9. What type of course does City and Guilds actually prefer?

A. You will realise I am really making personal comments here. I deplore abstract formal treatment of topics, and rote learning rather than understanding. I like work to be linked to the student's life, the use of visits films etc., and in general an imaginative approach.

Q.10. What type of examination, assessment, etc., does City and Guilds prefer?

A. I deplore Precis, Sentence Correction, 'watered down' versions of GCE topics, and academically worded questions. I like questions to be topical and linked to the students' environment. But we do not in any case necessarily require a written exam: if colleges prefer to use other methods, this is quite acceptable. You will see there is no mention of calling for exam papers in the 1964/65 M.E.C.P. notes.

- Q.11. (a) Has the rule about withholding certificates from students failing 'satisfactory completion' of Social Studies ever been enforced?
- (b) What does 'satisfactory completion' mean, anyway?
- (c) When was this rule first introduced?
- A. (a) Yes, When and if a student deliberately defies the college over work and the College Principal desires it.
- (b) Satisfactory in the eyes of the college.
- (c) 1957.
- Q.12. To what extent is it envisaged that Robbins will alter the present situation?
- A. Not at all.
- Q.13. What principles do City and Guilds feel should govern the selection of topics from the Ministry pamphlet for Social Studies schemes?
- A. Whatever the College wants.
- Q.14. Are any topics regarded as specially important?
- A. None, except of course expression work.
- Q.15. (a) Is Social Studies to any extent 'indoctrination' (of the type suggested in 'Freedom in The Educative Society') for cultural continuity?
- (b) How far, in City and Guilds opinion, should social studies teaching be aimed at obtaining acceptance of present society? How far at obtaining criticism of it?

A. (a) We would wish to encourage cultural continuity, and to discourage the tendency towards 'two cultures'. We would attempt to integrate technical studies and life, and also to encourage individual flowering.

(b) Criticism is all right, provided it is constructive and informed. I would use the word 'tolerance' rather than 'acceptance'.

Q.16. Is the prime function of social studies teaching to provide information or to change attitudes?

A. Give information accurately and allow the student to arrive at his own attitudes, which should logically then be reasonable ones. But it must be truth, not 'coloured' information.

Q.17. City and Guilds notes stress certain Ministry Pamphlet methods, but omit others. Why?

A. This is largely fortuitous: but some omissions also coincide with methods which are impractical in view of Part Time Day or Evening only teaching.

APPENDIX III

1964

D/122/5

NORTHERN COUNTIES

TECHNICAL EXAMINATIONS COUNCIL

Course for the Certificate in Office Studies

(First Year)

SOCIAL STUDIES

Time Allowed - 2 Hours

Answer FIVE questions

1. What should an office manager have in mind when looking for ways in which to improve the efficiency of his office?
2. The North East region of Britain has a high level of unemployment. What are the reasons for this, and what can local and central governments do about it?
3. What are the effects of frequent television viewing on individuals, and on social life generally?
4. Why has there been a large increase in the ownership of private cars in recent years? What are the effects of this increase on life in town and country?
5. Discuss the effects of the offer of trading stamps from the point of view of the consumer, and that of the trader.
6. State the case for and against compulsory part-time education for young people who have left school at the age of 15.
7. What is the aim of the Beeching plan for the railways, and what are its effects likely to be?

8. How can the ordinary citizen try to influence the policies of the central and local governments?
9. Front-page news in one newspaper may not appear in another. Why should this be so?
10. Should clerical workers join a trade union? Give reasons for your answer.
11. The proportion of retired people in our population is increasing. What problems does this cause, and what can be done about them?
12. A television set may be rented, bought outright, or by hire-purchase. Which method would you choose? Give reasons.
13. What ways of saving are open to young people? How would you choose between them?
14. Why does the consumer need protection, and how can this be given?
15. Compare the advantages and disadvantages of buying a house with those of renting a flat.

APPENDIX IV: COLLEGE POLICY STATEMENTS

Durham: 'I Believe . . . '

Stockton/Billingham.

Darlington.

Wallsend: 1959 Scheme and Comments.

DURHAM TECHNICAL COLLEGE

Technical Teachers' Certificate

Special Method

L I B E R A L S T U D I E S

"I B E L I E V E....."

S.G.C. Stoker.

"I believe....."

Introduction

Work in the field of Liberal Education is very much a matter of sincere belief and conviction. This, of course, is true of all educational work, but it has special significance to the teacher of Liberal Studies. Perhaps an attempt to define what is meant by Liberal Education will serve to emphasise why one must have absolute faith in such work.

Liberal educationalists are normally hesitant when asked to define their work. Perhaps this is because it covers such a wide field of activity. Often it is because they themselves are not quite sure what it is all about. It is described as 'Liberal Studies', 'General Studies', 'Social Studies' and 'Environmental Studies'. Of these titles, I think that perhaps the latter gets as near to the truth of the subject as possible. Surely Liberal Education is an attempt to promote HUMAN AWARENESS, and implies the study of Man in all his moods.

The planet on which we live only has significance because of the presence of Man. History is the study of the development of man, geography is the study of man in his environment, and the vast fields of science and technology are accounts of the constant struggle of man to come to terms with natural laws. In all types of learning Man is the key figure. Yet more and more he is diverted from the

desire to study himself and those around him. Once man forgets that his life is based on and dictated by the activities of other men, intolerance, bigotry, greed and unhappiness rule civilization.

In no pursuit does man tend to get his sense of priorities more wrong than in his search for education. This, of course, justifies the discussion of Liberal Education in the light of the work of the Technical College. The place of Liberal Education in the Technical College.

The development of Human Awareness in the Technical College can take place on many vehicles. The emotions of joy, sadness and fear can be brought about in the study of Music. But such emotions are not foreign to those engaged in Motor Vehicle Technology. The Engineer and the Musician are mutually involved in the problems of 'living' or 'existing'. From this premiss, therefore, it is impossible to view Liberal Education as a 'veneer of culture' for the Engineer. Surely if we accept the fact that we live in an age of scientific progress it is the man who is unaware of the technical advance around him who is ignorant?

I prefer the title Liberal Education to 'Liberal Studies'. The latter suggests that it is an academic discipline of the same type as 'Business Studies' or 'Social Studies'. This is not so, since Liberal Education often 'happens' in a building without it being sponsored by a formal organisation. Even

more important, it exists quite often despite the attempts of others to kill it. The spirit of Liberal Education is demonstrated in intangibles in Further Education; in the joy of taking part in the College dramatic production; in the feeling of pride at gaining a Duke of Edinburgh Award; in the clarity of mind and purpose of a young student. Those concerned in Liberal Education are therefore involved in the whole personality of the student. They do not merely teach Civics to Miners.

The problems of Liberal Education

1. The Staff

The Liberal Studies teacher who carries around with him an air of academic pomposity is a menace. How can such a man feel arrogant when often he is not capable of mending a fuse or filling-in his Income Tax form? Yet this is the principle reason for antagonism between those on the Liberal Studies staff and their colleagues. Only in an atmosphere of mutual trust and respect can Liberal Education survive. Liberal Education covers several Departments in a Technical College, and even more fields of employment of students. It is essential, therefore, that the Liberal Studies man should get to know his colleagues. This is a formidable task if he is on the staff of a large College. Aloofness will lead to scorn and lack of sympathy, and the problem must thus be faced. A quick glance at Carnegie's 'How to win friends and influence people' will pay dividends.

Who are the two main enemies? One is the middle aged and competent teacher with great pride in his skill. He is often well-read and one could say that he was liberally educated, but he lacks tolerance and is very narrow minded. The other is the bright young man, completely wrapped up in his own subject, and who considers that anything outside his particular discipline is a waste of the valuable time of both staff and student. If you ever give the impression to either of these men that you are trying to impede his sincere desire to achieve good examination results, you are forever damned. Never give the impression that you are trying to steal time. Can you perhaps even help him by dealing with Technical English or Examination Technique? This man will never really listen to you until he respects you. Show that you have just as much pride in your work as he has in his. To this end it is essential that your classroom discipline, administration, lesson preparation and punctuality set a very high standard. You may even have to concentrate on marking your registers very neatly. Always remember that the staff of a technical college is engaged in a great work on which much of the future of the nation depends. If, in the eyes of the staff, you are a valuable part of this task, rather than a troublesome appendage, you will at least be able to set about your job with confidence. This brings you face to face with the students.

2. The Students

Students are often even more suspicious of Liberal Education than the staff. Technical Education is very relevant to their life and their ambitions. Along you come and suggest that there is 'something missing', and they take it as a personal insult. Up goes the cry 'Why can't we do extra Maths?'. You are an intruder in the vital business of collecting certificates. Up goes the brick wall between you

The Liberal Studies teacher is faced with the enormous task of justifying himself and his work before students. It takes humility to do so, but even if this task takes months, he must never refuse to do so. The mere cut and thrust of the argument about Liberal Studies is, in itself, part of the process of Liberal Education.

What should the teacher of Liberal Studies deal with in the classroom? There are of course, no general rules, though the Union of Lancashire and Cheshire Institutes thinks that a formal syllabus and examination papers are necessary. What a horrible thought! Suffice it to say that though the horizons of the syllabus should be wide, the scheme of work must be 'particular' and 'student-centred'. By all means accept suggestions for the syllabus from the students, this way you will know from the outset what they care about. Above all, make the skeleton syllabus particular to the age, occupation and particular problems of each group you take.

Try to avoid imposing yourself upon them, but rather make yourself available to guide their discussions.

What Liberal Education lacks at the moment is the personal involvement of members of staff of all departments. If the Liberal Studies teacher says to the apprentice Plumber 'The colour bar is a despicable thing' the plumber looks for a reason to disagree. If the Lecturer in Building says the same thing to the same student, mutual trust makes the suggestion more reasonable. Hence the enormous importance of Tutorial periods for both Full Time and Part Time Day Release students. Adult conversation about vital issues is possibly the most important feature of Further Education. The tutorial system fosters this development.

COUNTY COUNCIL OF DURHAMSTOCKTON/BILLINGHAM TECHNICAL COLLEGECity and Guilds of London InstituteSocial Studies

Syllabus provided for craft students studying the following courses:

Machine Shop Engineering

Machine Shop Craft Practice

Fabrication of Steelwork

Sheet Metal Work

Electrical Installation

Electrical Fitters

The total amount of time devoted to Social Studies varies according to the demands made by each separate Advisory Committee.

The general pattern of Social Studies will be as follows:-

Years One and Two

An attempt will be made to introduce the student to the industrial setting in which he works and the social setting in which he lives. This emphasis would not preclude a treatment of current topics.

The method would be to fan out from the student in the firm; the aim to give a frame of reference for his technical activity.

In these two years particular attention will be paid to English (Outline attached).

Assessment of Work

The assessment will be made under three heads. Marks will be awarded for participating in discussion, for individual talks and on three pieces of written work to be submitted each term.

Years Three and Four

The third and fourth years will cover general aspects of social organisation (with some historical references), and will deal with such topics as the concept of justice, the development of democracy, significant engineering discoveries and the growth of scientific thought. Other topics such as the use of leisure, attitudes to sport, value judgments in the sphere of entertainment will also be considered.

English will be considered in these years but with slightly less emphasis on literary skills.

Assessment of Work

By participation in discussion, by occasional written work and by a terminal essay which will arise from the topics discussed during the term. This will involve some research on the part of the student and will be part of his homework.

Social Activities

Plans are being made for the provision of lunch time talks and concerts, which will include such diverse people as racing drivers and opera singers.

County Council of Durham
STOCKTON/BILLINGHAM TECHNICAL COLLEGE
City & Guilds of London Institute
English as part of Social Studies Course

1. General: The following points about the students at this level should be borne in mind when any scheme of work is drawn up:-
 - (i) Range of abilities and interests will be wide.
 - (ii) Within this range, English is likely to be very weak.
 - (iii) Students themselves may show no initial desire to rectify this.
 - (iv) In their daily lives (they will claim) they have little for reading and rarely need to write at length.
 - (v) They will consider (sometimes with defiance) that they have left school.
 - (vi) Awareness of and interest in the world around will be very limited.
 - (vii) There will be little or no reading background (though some may be avid readers).
 - (viii) Critical faculty will be undeveloped (few critical yardsticks).
 - (ix) Ability to perceive, select and assimilate facts will be slight.
 - (x) Reasoning and argument will be disorderly and one-sided.

2. Approach: Will need to be modified in the light of above facts.

- (i) Schoolroom atmosphere may be discarded (at teacher's discretion) in favour of informality, freedom, developing sense of responsibility.
- (ii) Aids of all kinds will prove useful (films, filmstrips, charts, records, tape-recorders, etc).
- (iii) Correct balance of spoken and written work must be maintained. Oral will generally take up greater share of time, but written work must have gradually increasing share.
- (iv) Some form of concentric system of progress may be valuable, as constant recollection and revision will be necessary.

3. Material and Presentation

Two aspects of students' needs in English must be covered.

(a) Occupational Spoken and written English directly related to the students' jobs. This may be subdivided as follows:-

- (i) Individual - The student's needs when facing others (management, colleagues) alone.
- (ii) Group - The ways in which the student needs to combine with his workmates.

- (iii) Industrial - The student as part of a larger
(national and world) unit.
- (b) Non-Occupational - Spoken and written English related
to the students' place in the community. This may be
subdivided as follows:-
- (1) Personal and Domestic - Day to day use of English
(conversational to brief form
of letter-writing).
- (ii) Social - English as required for group
pursuits, clubs, societies,
gatherings of various kinds.
Awareness of social background.
- (iii) Cultural - English related to leisure-time
activities - reading, listening,
discussing. Appreciation of the
various media of examination.
(Radio, T.V., Films, etc.).

DARLINGTON COLLEGE OF FURTHER EDUCATION
DEPARTMENT OF LIBERAL AND SOCIAL STUDIES
Syllabus for Classes in Social Studies

A fairly broad syllabus is followed. All matters concerning man's relationships with fellow men are relevant, and teachers are free to pursue topics of special interest to themselves, within a broad general framework. In the case of some classes in the Engineering Department the general guidance laid down by the City & Guilds programme for Social Studies is normally followed. The topics normally dealt with are as follows:-

1. The Local Community
2. The Work of Local and National Government
3. Notable Engineering Discoveries) For
4. Origin and History of Various) Engineering
- Branches of Engineering) Students
5. The Origin of Man
6. The Contribution of Ancient Civilisation
to Life Today
7. The Law and its Administration
8. Local Social History
9. The College and its Organisation (including
Students' Union)
10. Democracy and Other Systems of Government
11. The Welfare State
12. The Budget and Taxation

Present Day World Problems:-

13. U.N.O.,
14. Racial discrimination
15. Europe and the Commonwealth
16. The Theatre, Films, Radio, Television and Sport.

It is not expected of course, that all the above could be included in the work of a class, but a selection from the above should be made and a scheme of work prepared accordingly.

Visual Aids, especially film strips are used and discussion is encouraged where ever possible.

All students in these classes should be urged to participate as far as possible in the activities of the Students' Union and information about these activities should be supplied to them regularly.

DARLINGTON COLLEGE OF FURTHER EDUCATIONDEPARTMENT OF ENGINEERINGPRE-APPRENTICESHIP COURSESYLLABUS FOR:- SOCIAL STUDIES1. The State

Parliament and the Throne, Lords and Commons.

Parliamentary procedure. Elections and the electorate.

Ministers and their responsibilities. Forming a cabinet.

The Party system. Public services and the state.

2. Local Government

Constitution of local authorities. Qualification of councillors. Executive powers of committees.

Municipal services.

3. Rates and Taxes

Direct and indirect taxation. State expenditure.

Local rates. Public Health.

4. English Law

Old and new. Basic principles. Civil wrongs and criminal offences. Forms of punishment. Organisation of the Courts.

5. Banking

Private and joint stock banks. Opening an account.

Cheque system. Services to customers. Bank of England.

6. The Stock Exchange

How the Stock Exchange is managed. Brokers and jobbers.

7. How a British Law is born. Draftings and Readings,
Royal Assent.

8. History of development of Trade Unions. Conditions of
service in Engineering Industry. Training for industry.
Wages and incentives. Location and organisation of
Industry. Control of Industry and Commerce.

DARLINGTON COLLEGE OF FURTHER EDUCATIONStudents' UnionClubs and Societies

All members of the Students' Union are entitled to join the following Students' Clubs and Societies. Anyone who is interested in any of these activities is advised to contact the student or member of staff whose name is appended, or to hand in their names at the College Office at Cleveland Avenue:-

Association Football	Mr. A.H. Masterman (Building Dept.)
Athletics	Mr. G. Vince (Engineering Dept.)
Badminton	Miss L.J. Gibson (Commerce Dept.)
Judo	Mr. Dodd.
Weightlifting	Mr. J.G. Thorman (Engineering Dept.)
Netball	Miss D. Levison (Commerce Dept.)
Table-Tennis	Mr. D. Morgan.
Basketball	Mr. Lennon (Science Dept.)
Drama Group	Miss A. Stirling.
Archaeology	Miss A.M. Collins (Liberal and Social Studies (Dept))
Golf	Mr. Molloy (Commerce Dept.)

Students Arts Society

The formation of a Students Arts Society is at present under discussion. The purpose of this Society would be to encourage and support dramatic and musical productions, films and similar cultural activities within the College. It would

also aim at keeping its members fully informed of all other cultural activities in Darlington and the surrounding area, and it is hoped that a monthly bulletin containing a list of such activities will be issued to all members.

Anyone interested in joining the proposed Arts Society should hand in their names to any member of the Students Union Societies Committee, or the College Office at Cleveland Avenue, or the Head of the Department of Liberal and Social Studies.

N.B. Membership is FREE to all members of the Students Union.

Liberal Studies for Full-time StudentsWednesday Afternoon1964-65 Session

Given below are the details of the activities from which students may choose on Wednesday afternoons in the 1964/65 Session.

NOTE 1. Some activities are for the WHOLE afternoon.

i.e. 1.45-4.15p.m., others for the FIRST HALF of the afternoon ONLY, i.e., 1.45 - 3.00 p.m. and others for the SECOND HALF of the afternoon ONLY, i.e., 3.00-4.15 p.m.

Students may choose EITHER (a) ONE activity for the whole afternoon.

OR (b) A PAIR OF activities, one for the first half and the other for the second half of the afternoon.

2. Students should, as far as possible, choose activities which are DIFFERENT from the work they do in class as part of their normal curriculum. Some activities, therefore, are not open to students to the Department which normally deals with them.
3. As some activities are open to Male or Female students only, before making a choice, all are advised to make sure that they are eligible for the particular activity concerned.

4. The places where the groups meet are indicated as follows:-

AS Art School, Northgate. DS Domestic Science Centre
 CA Cleveland Avenue. RDS Rear of Domestic
 N Northgate. Science.

5. Bring this list with you NEXT WEDNESDAY AFTERNOON - this is essential.

+ These activities can help you to qualify for the Duke of Edinburgh's Award.

All-afternoon Activities i.e. 1.45 - 4.15 p.m.

Group No.

1. Dress and Needlework Not available to Catering and Domestic Science Department students. 18 girls. Tutor - Mrs. Armstrong. Rooms - DS2 or N9. Dressmaking etc. from Students' own materials. Guidance will be given regarding style, materials, use of equipment etc.
2. Needlecrafts Not available to Catering and Domestic Science Department students. Tutor- Mrs. Tingrose - Room N9 - Embroidery and other needlecrafts applied to fashion and accessories and garments.
3. + Cookery Not available to Catering and Domestic Science Department students. 16 students. Tutor - Mrs. Mudd, Room - Reid Street. Preparing and presenting appetising and attractive meals, delicacies and confectionery.

- 4a.+ Art - 36 students. Tutors - Mr. Hodge and Mr. Berry.
- 4b. Room AS 7.
5. China-Painting 12 students. Tutor - Mrs. Sherwood - Room N27.
6. Work Commando 24 students. Tutor - Mr. Noble Room CA 244. Practical service to the Community and assistance to the less fortunate, e.g., clearing and tidying derelict sites, visiting and doing jobs about the house for the old and the infirm, helping in children's homes etc.
7. Photography 12 students. Tutor - Mr. Crawford - Room C.323. How to make the best use of your camera. Painting, Developing, and enlarging. Students provide camera and film.
- 8.+ Practical Radio 12 students -Tutor Mr. Colling - Room CA 12.
9. Chess 12 students. Tutor - Mr. Poulton - Room CA 345. An absorbing and stimulating game, which exercises the brain! Beginners are welcome and will receive coaching.
- 10.+ Canoe-Building 10 students. Tutor - Mr. Harpe - Room Holy Trinity School. Students will be assisted to build their own canoes. Students pay for materials.
- 11.+ Theatre Group Tutor Mr. John Morton - Room CA Hall. Instruction in acting, stagecraft etc., with a view to producing shows during the year. Readings of plays will also be made.

- 12.+ Archaeology and Local History 20 students. Tutor - Miss Collins - Room 102. Elementary instruction for beginners. Participation in excavations near Darlington. Visits to Archaeological sites in the area.
13. Library Service Group 8 students - Tutor Mr. Bowron → Room CA Library. Arranging and cataloguing books in the college library, book-binding, arranging of exhibitions and displays. Information work.
14. Choral Speech and Department 20 girls. Miss Williams - Room H5. This activity will help to develop the poise and confidence which are so essential in leisure pursuits as well as work. The group takes part in local choral verse and speaking competitions.
- 15.+ Music Tutor - Mr. Woodhouse - Room 245. Musical appreciation i.e. listening to and talking about music; music for performers - it is hoped to form a small choir of mixed voices or an instrumental group.
16. German Life and Language 20 students. Tutor Mr. Harper Room CA 306. German for beginners, mainly conversation. Life and customs of Germany and Austria. Preparation for foreign travel.
17. French Life and Language 20 students. Tutor Mrs. Gardner. Room CA 304. French for beginners, mainly conversation. Life and customs of France etc. Preparation for foreign travel.

- 18.+ Woodwork 12 students. Tutor - Mr. McCarthy - Room N.30.
Handicrafts. Instruction in making small useful articles.
19. Weightlifting Tutor - Mr. Thorman. Room RDs2.
Instruction in weightlifting for beginners and more advanced pupils.

Activities taking place in the first half of
the afternoon only 1.45 - 3.00 p.m.

20. Badminton 8 boys. Tutor - Mr. Henzell - Room N.Hall.
An indoor game for two or four players. Similar to tennis but played with smaller racquets and shuttlecocks. This is an energetic game, so light clothing and gym-shoes are essential. Racquets and shuttlecocks will be provided.
- 21.+ Magazine Editing and Production 15 students. Tutor - Mr. Watson. Room Ca 306. Gathering news, editing, setting up and producing the College's own magazine, "Tech Times".
22. Athletics 15 students. Tutors - Mr. Vince and Mr. Snook.
To be held on C.A. playing fields. Students provide running kit and suitable shoes. Training in track and field events.
23. Modern and Traditional Dancing 20 students. Tutors - Miss Smith and Miss Anderson. Room - Common Room.
Dancing of all kinds - Ballroom, Scottish, Square, Continental, Folk.

24. Rugby Football Tutor - Mr. Catmull. CA Playing Fields. Instruction in the rules of the game will be given to beginners.
- 25.+ Metalwork 12 students. Tutor - Mr. Sledge. Room CA Workshop 6. Elementary workshop practice and the making of useful articles from metal. Jeans or old trousers should be worn. Not available to engineering students.
- 26.+ Dress and Make-up 20 girls. Tutor - Mrs. Tyrell. Room 307. Style and care of clothes. Grooming, Hair-styles, Cosmetics etc.
27. Football 22 boys. Tutors - Mr. Smith and Mr. Cansfield C.A. Playing fields. Students provide own boots. Strip provided on loan.
28. Netball 14 girls. Tutor - Miss Levison. To be held on C.A. Netball Courts. This is an energetic game, so light clothing and gym-shoes are essential.
29. First Aid 16 students. Tutor - Mrs. Petch. Room CA 245. Elementary instruction, in all branches of first-aid
30. Youth and Modern Life Discussion Group 15 students - Tutor Mr. Pottinger. Room CA 201. Discussion, films and outings centred on topics of concern and interest to teenagers.
- Activities taking place in the second half
of the afternoon 3.00 - 4.15 p.m.
40. Badminton 8 girls. Tutor - Miss Gibson. Room N. Hall. An indoor game for 2 or 4 players. Similar to tennis,

but played with smaller racquets and shuttlecocks.

This is an energetic game, so light clothing and gym-shoes are essential. Racquets and shuttlecocks will be provided.

- 41.+ Duke of Edinburgh's Award. 20 boys. Tutor - Mr. Vince. Room CA 302. Activities for those who have started or wish to start on the Silver Award. (Note - all College students may start the Silver Award without having obtained the Bronze Award first). Instruction will also be given for the Gold Award. Help will be given in preparing for all sections, i.e., hobby, physical fitness, expedition and public service.
42. Athletics 15 students. Tutors - Mr. Snook and Mr. Sledge. To be held on CA Playing Fields. Students provide running kit and suitable shoes. Training in field events, and track events.
43. Rugby Football Tutor - Mr. Henzell. To be held on C.A. playing fields. Instruction in the rules of the game will be given to beginners.
44. Department and Keep Fit 20 girls. Tutor - Mrs. Tyrell. Room CA 307. Exercises designed for health and poise.
45. Football 22 boys. Tutors - Mr. Smith and Mr. Cansfield. To be held on CA playing fields. Students provide own boots. Strip provided on loan.

46. Typewriting 24 students. Tutor - Miss Levison.
Room Hut 4. A useful skill for work and leisure.
Beginners only. Not available to Commerce Department
students.
47. Swimming 24 students. Tutor - Mr. Begg. Students meet
at entrance to Gladstone Street baths at 3.20 p.m.
48. Model Making 12 boys. Tutor - Mr. Pottinger. Room CA
124. Practical work on students' own kits; aircrafts,
ships, cars, locomotives etc.

Wallsend General Scheme. English & Social Studies in
Mechanical Engineering Craft Practice Course

1st Year

ENGLISH 1. Technical writing

Tools, machines, methods,
materials.

Vocabulary, definitions.

Sentence construction.

Paragraph arrangement.

2. More personal writing.

e.g. description of work place.

'character sketches'.

Hobbies and interests.

3. Written work on social

studies (see below)

4. Oral work to be related
to all above.

INDUSTRY. A project essay, to
be undertaken probably in
the second term, on the work
of the student's own firm.

SOCIETY. Working in a com-
plex industrial society.

Establish notion of interde-
pendence, by contrast with
simpler societies, mediaeval
& present day undeveloped.

Second Yr.

ENGLISH 1. Technical writing

As in 1st Year. More advanced
work as engineering experience
grows.

2. Formal & informal letter
writing.

3. Simple report writing.

4. Personal writing - develop-
ment of 1st Year's work.

5. Written work on social
studies.

6. Oral work in all above items

INDUSTRY. Project essay, sec-
ond term, on student's own
industry. e.g. shipbuilding.
Marine engineering.

1. Development of democracy in
Britain.

2. Democracy at work - local
Government.

3rd YearENGLISH 1. Technical writing

More advanced, oral and written description, machines, methods, processes.

2. Further report & letter writing.

3. Personal writing. Matters of opinions.

4. Written work on social & industrial studies.

5. Oral work on above.

Discussion and debate.

INDUSTRY 1. Project essay on craft practice.

2. Study of industrial organisation.

The Joint Stock Company

(a) Essentials of financing.

(b) Functions & organisation

within the firm.

SOCIETY. Democracy at work, national government, taxation, Budget.

4th Year

ENGLISH 1. Technical writing
More advanced exercises.

2. Report & letter writing.

3. Personal writing - emphasis on clear thinking, dangers of illogical generalisation, prejudice, emotion - discussion of the Press.

4. Written work on social and industrial studies.

5. Oral - discussion & debate.

INDUSTRY. Wider industrial organisations. e.g.

1. Trade Unions.

2. Employers Organisations.

3. Research Organisations.

Conflicting views on living in society & social organisation.

This scheme, which is divided into four years, keeps fairly closely to City and Guilds as far as material is concerned: however, the 'snags' of repetition and lack of connectivity, which were pointed out when the City and Guilds suggestions were examined in Chapter Four above, have largely been avoided by simplifying the rather complex City and Guilds classification of topics, and by reorganising the material along more centrifugal lines. The material is therefore now classified under three headings, English, Industry, and Society.

The English section is largely concerned with technical writing of various kinds - notably descriptions, reports and business letters - but also involves personal expression work. It starts from very simple remedial work, and moves outwards to embrace more advanced descriptions, various types of report, and such matters of personal expression as the statement of opinions and the dangers of false argument and unclear thinking. The Industry section involves project work, in the first three years, plus group study in the third and fourth year. It is organised in a fully centrifugal manner, beginning with the student's own firm, and moving out through his industry to craft practice in general, industrial organisation, and matters connected with labour relations and research. The section on Society is organised similarly, though the method of approach is not specified. First year work is concerned with establishing the notion of inter-

dependence in complex modern societies: from that we progress to the development of democracy and its local expressions, hence democracy at work on the national level, and finally we return to the question of living in society, and the conflicts of views on social duties and organisations.

This scheme, by itself, obviously cannot tell us very much about social studies teaching at Wallsend: but we can notice from it that the work is systematically thought through and carefully planned, and that while covering a somewhat narrow field, as social studies courses go, it is practically organised, and does well what it attempts to do. Its most important lesson, for the reader of this thesis, is that the colleges which have not supplied detailed material should not therefore be written off as doing nothing: within its limits, this scheme shows quite a number of affinities with, for example, the syllabuses in use at Durham.

APPENDIX V: INSTRUMENTS
OF INVESTIGATION

Letters to Colleges. & L.E.A.s

Objective Tests.

49, Northdene,

Birtley,

Co. Durham.

3rd April, 1964.

Dear Sir,

I am attempting to inaugurate a Post-Graduate (M.Ed.) Research Programme, under the University of Durham, into the methods and effectiveness of the teaching of Social Studies in Technical Colleges in the North East. In order to keep the scope of the programme within reasonable bounds, I am proposing to cover only those courses which involve Social Studies teaching under a City and Guilds syllabus (e.g., Mechanical Engineering, Craft Practice, Mechanical Technicians, Fabrication of Steelwork, General Engineering and Commerce): but even so, I am obviously only going to be able to carry out the programme with the assistance of members of staff of other Technical Colleges in the area. Accordingly, I would be most grateful if you could answer the questions below, and let me have the reply as soon as is convenient to you.

1. What courses involving Social Studies exist in your College, and what are the teaching time allocations and the number of students in each? (Please quote numbers separately for individual years).

2. How many members of staff are normally involved in teaching this subject? (a) Full-time, graduate; (b) Full-time, non-graduate; (c) Part-time graduate; (d) Part-time, non-graduate.
3. Please indicate if any of the above were not appointed primarily to each Social Studies and/or English, quoting official specialities in each case. (N.B. Names of members of staff are not needed).
4. Please indicate what teaching aids are available in your College to teachers of Social Studies, and how much use is made of the Library and visits.
5. Does your College have any official 'line' regarding methods of teaching the subject or the aims and objectives to be pursued in teaching it? If so, how rigidly is it enforced?
6. Would you or your members of staff be prepared to answer further questionnaires regarding teaching methods, responses of different types of student, and constitution of classes?
7. Would you or members of your staff be prepared to co-operate in attempting to assess the effect of particular methods on particular classes in the 1964/65 Session?
8. Would you or members of your staff be prepared to be interviewed on these topics by me?

9. Would you or members of your staff, if the answer to 7. on Page 527 is 'Yes' be prepared to 'swap' classes, or methods, at mid-session, for control purposes? (This may of course not always be possible, for reasons of time-tabling).
10. Would you, or members of your staff, be prepared to assist in setting and administering standardised examinations in the subject (where relevant), either at mid-session or at end of session, in 1964/65?

I apologise for such a massive list of questions, but until I know how many of these proposals are acceptable to other Colleges, I cannot define the exact lines of my research any more clearly.

I hope that whatever comes out of this project will be of some help to Technical Education, if only by way of "clearing the decks".

Yours sincerely,

(Signed) C.C. Hebron.

The Principal,
Social Studies Department)
Technical College.

49 Northdene,
Birtley,
Co. Durham.

28th May, 1964.

The Principal,
(Social Studies Department)
Technical College.

Dear Sir,

Perhaps I may refer to my circular letter and questionnaire sent to you on 3rd April, 1964? This asked for information regarding Social Studies teaching in your College, for M.Ed. thesis purposes. I quite realise that you must be very busy, but I would be most grateful for a reply to it: If time does not permit of this, could it possibly be arranged for me to call on you, or your Head of Department, sometime between now and the beginning of next Session, to discuss this question?

It strikes me that you may well require bona fides of my status as an M.Ed. candidate: if this is so, please contact The Registrar of Durham University, Dr. Saxton, my provisional supervisor, Mr. Pennington of Grey College Durham, or my current supervisor, Mr. Anderson, any of whom I am sure will be able to satisfy you. May I also apologise for the oversight by which my original letter was signed on the master copy, instead of on each individual copy. This was

entirely due to a misunderstanding of official procedure, and the slip was made in all good faith.

May I also take the opportunity of inserting an extra question, based on certain replies received:

11. Please state the classes, numbers, and hours per week of classes receiving Social or General Studies tuition at the request of H.M.Is but not under City & Guilds requirements, where these are of a level below H.N.C.

Thank you very much for your co-operation.

Yours faithfully,

(C.C. Hebron)

49 Northdene,
 Birtley,
 Co. Durham.

July, 1964.

The Lecturer in Liberal Education,
Technical College.

Dear Mr.....

I am at present analysing various City and Guilds syllabuses for Social/General Studies, in connection with the research we spoke of earlier, and I would be very grateful for your comments on the following points. There isn't any immediate rush over these - any time convenient to you will do: although it would help me with an interview with City and Guilds, if it isn't troubling you too much, if you could manage to let me have them by about 21st July.

1. The MECP syllabus is very detailed, and seems rather repetitive. Do you in practice find difficulties over student repeating work from one year to another, and if so, how do you overcome this? Or isn't there very much continuity from one year of the course to another?

2. The MET syllabus also appears to repeat various topics from MECP. Again, does this cause trouble with students coming up from MECP, and how do you get around it? (What proportion of MET students - roughly- transfer from MECP, in any case?).

3. The Building Crafts syllabus is also very detailed, but is not split up into years. However, in this case, the teacher would seem to have to be a humanist, a commerce specialist, and a craftsman rolled into one. How do you split this syllabus up for teaching purposes, and do your staff in fact find it presents difficulties in teaching? How are these overcome?

4. The Gas Fitting, Steel Fabrication, and MET syllabuses are very general in character - sometimes almost cursory. Since these courses are from three to five years in total length, do you find the topics suggested insufficient either in range or depth? To what extent do you go beyond these topics in practice and what principles do you feel should govern the construction of a college syllabus or scheme of work for these courses?

5. The General Engineering, Chemical Plant, Foundry Practice, Metallurgical Technicians, Instrumentation, and Coal Mining courses do not give any syllabus suggestions at all, but refer teachers to the Ministry of Education 1962 Pamphlet. This in turn gives, not a syllabus but a "storehouse" of topics from which selections may be made. I wonder if you could be so kind as to tell me what principles govern your selections from these?

6. All these courses are two or more years in length, What proportion - roughly - of student continuity between years would you say there was in your college?

Some of the information I am asking about, in certain cases, will already have been supplied on College schemes of work; but I would still be grateful for any additional comments you may care to make.

Thank you very much for allowing me to bother you again.

Yours sincerely,

(C.C. Hebron)

49 Northdene,
Birtley,
Co. Durham.
12th September, 1964.

The Director of Education
(Further Education),
.....Education Authority,
.....

Dear Sir,

I am making enquiries regarding material for a thesis I am writing for the M.Ed. degree of Durham University on the teaching of Social Studies in Technical Colleges in the North-East, for which my supervisor is Mr. Andison of Newcastle University Department of Education, Leazes Terrace. My terms of reference include operative, craft and technicians courses, and most of the work involved touches Principals or Heads of Department in the actual Colleges, with whom I am in contact. However, I am also planning to include a section dealing with the actual Local Authority policy in the matter, and attempting to trace the history of the development of Social, General and Liberal studies within the area.

Accordingly, I am writing to you to ask if you could be so kind as to give me some information on your Authority's policy regarding this type of educational provision. The points I would like to discover are:

1. What is the Authority's policy over this subject and its introduction (a) as regards introducing or teaching it?
(b) in terms of provision of buildings, equipment or grants for equipment, and staff?
2. When did this policy originate, and have there been any significant developments or policy changes since that date.
3. Was the adoption of the policy original within the Authority (as, for example, I understand it was in Durham), or was it adopted at the instigation of the Ministry or the City and Guilds.
4. What does the Authority consider should be the main objective or aims of this kind of educational provision?
5. Did the Authority, or any of its officers, submit any material to (a) the Crowther Committee?
(b) City and Guilds advisory committees responsible for technical syllabuses including the subject?

I quite realise that, in some cases, the Authority may have no fixed policy over some of these items, and the matter may be left to the discretion of individual colleges, but nevertheless I would be grateful for any help you can give in answering this. Please accept my thanks for having allowed me to bother you.

Yours sincerely,

(C.C. Hebron)

THE TEACHING OF SOCIAL STUDIES IN TECHNICAL COLLEGES IN
N.E. ENGLAND THESIS FOR SUBMISSION TO DURHAM UNIVERSITY
STUDENT QUESTIONNAIRE: METHOD STUDY

This questionnaire is designed to help in research into Social Studies teaching in this area. It is entirely confidential, and students are NOT asked for their names.

PART 'A': PERSONAL INFORMATION

Please answer the following questions accurately and honestly.

1. Which College are you attending?.....
2. Please state your course:
 Course.....Year.....College Courses Reference.....
 Full Time/Part Time Day/Block Release/Evening ++
3. Have you ever taken any courses involving Social Studies before?..... Yes/No++
 If Yes, which course(s)?.....At which College?.....
4. What has this Social Studies course dealt with?.....

 What value do you feel you have got from it?.....

5. Please fill in the following personal details:
 Type of SCHOOL Last attended:
 Grammar/Modern/Technical/Comprehensive/Other++
 Age on leaving school.....Years. Age now..... Yrs.....
 Mths.....

Exams passed at school (with subjects):

.....

Are you now a member of any Youth organisation?

Youth Club/Scouts/YMCA/Boys Brigade/YHA/Other/None++

Do you at present attend any religious body?

Church of England/Catholic/Methodist/Baptist/Congregational/Other/None++

Favourite Sport.....Favourite Hobby.....

6. Please fill in, but only if you wish to, the following family details:

Type of house in which you live:

Terrace House/Council House/Council Flat/Semi-Detached/
Detached/Other++

Type of work done by father:

Unskilled/Semi-skilled/Skilled Craftsman/Technician/
Foreman/Manager/Professional/Other++

Have you any girl-friend? (If you are already married, please say so)

Steady/Casual/None/Already Married++

Number of brothers living at home, or nearby:

At work.....At school.....Below school age.....

Number of sisters living at home, or nearby:

At work.....At school.....Below school age.....

Please state whether your mother goes out to work or not: Yes/No++

How long does it take you to get to and from work?.....

++ In each case where this sign occurs at the end of a list cross out all the items on that list that do NOT apply to you.

PART 'B'

Below you will find a series of multiple-choice questions on various fields which come under the broad heading of 'Social Studies'. Each question has printed against it a series of alternative answers.

What you have to do is to underline the one you believe to be correct as in the example given below. You should work through the questions quickly: you may guess if you wish, but if you have absolutely no idea of an answer, you should go straight on to the next question.

There is no set time-limit for this section, but all in all you should only take about 15-20 minutes if you work straight through it as instructed.

EXAMPLE

Which of the following was Neville Chamberlain, Anthony
British Prime Minister at Eden, Winston Churchill,
the end of the World War II Clement Attlee.
in Europe?

QUESTIONS

1. What is the number of 23, 26, 49, 99, 110
Ministers in the present
Cabinet?

2. Which of the following is the main job of Members of Parliament?

to make and alter laws;
to decide Government policy;
to tell people what to do;
none of these.

3. Who controls the policy of a Civil Service Dept.?

The P.M. & Cabinet;
The Minister concerned;
The Administrative Officers;
The House of Commons;
The Civil Service Commissioner

4. For how long is a local Councillor elected at a time.

3 years, 4 years, 5 years, 6 years.

5. What are rates?

Local income tax?
A levy based on purchase value of property;
A levy based on the rent value of property;
None of these.

6. Which of the following countries is NOT a Republic?

Ghana, U.S.A., U.S.S.R.,
W. Germany, Sweden.

7. What percentage of Russians are members of the Communist Party?

all; about 50%, about 10%
about 1%; none of these.

8. In the event of a 'show-down' who has the final say in a meeting of the United Nations?

The Security Council;
The General Assembly;
The Secretary-General;
The Afro-Asian Bloc;
The U.S. and Russia.

9. Which country is NOT a member of the Common Market? France, Belgium, W.Germany, Switzerland, Italy.
10. To which organisation does Britain belong? The Warsaw Pact; O.A.S.; N.A.T.O.; East Econ; none of these.
11. Which statement correctly defines the Queen's position in the Commonwealth? Head of Commonwealth; Queen of Britain only; Head of Commonwealth; Queen of certain member states; Head and Queen of Commonwealth as a whole.
12. Which of the following pays the largest proportion of the cost of the National Health Service? Income Tax; National Insur. Stamps; The extra 6d. on petrol; Cigarette duty.
13. By which Education Act were Secondary Modern Schools created? 1870, 1902, 1916, 1944, 1962, none of these.
14. Which North-East Authority plans a change of school at 13+? South Shields; County Durham; Gateshead; all of these; none of these.
15. Which of the following definitions of the term 'member of the middle class' is of the most use in attempting to study social structure? Someone who doesn't get his hands dirty; Someone with a technical qualification; Someone who at work is in charge of other people; Someone whose earned income exceeds £1400 per year;

16. Which form of advertising is thought to have most effect on sales? Posters; T.V., Cinema Adverts; Newspaper adverts; Brochures.
17. Which Church is a large-scale landowner in this country? Church of England; Roman Catholic; Methodist; Baptist.
18. Which Church flatly denies the Theory of Evolution? Roman Catholic; Methodist; Jehovah's Witnesses; Christian Scientists; none of these.
19. Who controls the Police Force? The Home Office; Local Councils; Local Magistrates; Scotland Yard; The Lord Chief Justice; none of these.
20. Which can the Police NOT do? Detain a man for questioning; Search a man without a warrant; Search a house without a warrant; Carry firearms
21. Can a private person arrest a criminal? Yes; No; Only if he sees the crime committed; only in wartime; Only in self-defence
22. What is the Budget? A list of new taxes; A statement of how much money the Government needs; A statement of what services the Government is going to provide in the next year; An account

- of proposed Government expenditure and income in the next year; None of these.
23. Which statement most closely summarises Fraud's main ideas about psychology? Everything we do is based on sex; Men are usually reasonable; We have no souls, only minds; Our actions are often influenced by ideas and attitudes of which we are not consciously aware; What we really want is shown by our dreams.
24. In which year was the T.U.C., founded? 1868; 1886; 1908; 1926; none of these.
25. To whom is the Managing Director of a firm ultimately responsible? The other Directors; Shareholders; The Management Staff; The Workers; The Government.
26. Which of the following is the main job of a Manager? To keep the men working hard; To get orders; To get production flowing evenly; To create & keep happy relations on the shop floor.
27. Which of the following is usually an object of Union policy? To protect workers from victimisation; To improve working conditions and wages;

- To promote working-class solidarity. To reconstruct society in the interest of the workers; To provide a bargaining body with the employer; To provide Friendly Society benefit; To combine to give the workers as much power as possible; To support the Labour Party; All of these; None of these.
28. Who sits on a Works Committee? Managers; Directors; Foremen; Workers' Representatives; Union Representatives; All of these; None of these.
29. What is the Stock Exchange? A place where people buy & sell shares; A place where people buy & sell cattle; Newspaper reports of the prices of shares in industry; A Department of the Board of Trade.
30. Which is the most likely immediate result of a Balance of Payments crisis? Prices rise; prices fall; wages freeze; the value of the £ falls abroad; unemployment grows at home.

31. Which country cannot feed herself without food imports? U.S.A., Nigeria; Britain; France; South Viet-Nam.
32. Which industry is NOT found in the North-East? Coal; Steel; Fishing; Aircraft Engineering; Brewing; Shipbuilding; Railway Eng; none of these.
33. Which invention was made in the North-East? The spinning jenny; the steam loco the electric lamp; the steam turbine; all of these; none of these.
34. Which bridge across the Tyne first linked London and Edinburgh directly by rail. Redheugh; Scotswood; High Level; Tyne Bridge; King Edward; Swing Bridge.
35. Which town does NOT have a Roman or Medieval origin? Durham; Darlington; Middlesbrough; Newcastle; Gateshead.
36. Which was the Stockton and Darlington Railway's claim to fame? The world's first railway; The first railway to use steam locos; The first railway to carry passengers; The first railway to be a 'common carrier' for the public.
37. Which newspaper does NOT support a political party? The Daily Mirror; The Daily Mail; The Daily Telegraph; The Guardian; The Times.

38. Which is the 'odd man out', as far as artistic profession goes? D.H. Lawrence; T.E. Lawrence; Laurence Olivier; Lawrence Durrell; Gerald Durrell.
39. Which book won its author the offer of a Nobel Prize? Anna Karenina; Doctor Zhivago; Doctor at Sea; The Doctor's Dilemma; Cannery Row.
40. Which one is the atomic scientist? Dr. Beeching; Dr. Cockroft; Dr. Leavis; Dr. Schweitzer; A.J.P. Taylor; Wilson Harlow; Fred Hoyle.
41. Which T.V. Series first ran on B.B.C. 2? The Valiant Years; The Great War; Victoria Regina; Panorama; This Week; What the Papers Say.
42. Which T.V. Series is intended for students in Technical Colleges? Living your Life; Your Life in Their Hands; Meeting Point; Living in the Present; Going to work.
43. Which popular T.V. series is also accepted as having considerable artistic value? Dixon of Dock Green; Coronation Street; Z Cars; Steptoe & Son; Crane; Have Gun - Will Travel.
44. Which type of advert is banned by the I.T.A? Adverts relaying on sex-appeal; Adverts suggesting things they do not prove; Adverts claiming a 'miracle ingredient that

- cannot be tested; All of these;
None of these.
45. Which statement about T.V. is proven fact?
A lot of viewing weakens the morals; A lot of viewing weakens the imagination; A lot of viewing makes people unsociable; A lot of viewing can give very young children fits; All of these;
None of these.
46. Which safety regulation is laid down in the Factories Acts?
No long hair; No ties or loose clothing; Minimum clear fencing round all machines with moving parts; no running in the factory; Always wear goggles when grinding; All of these; None of these.
47. In which Century did the present series of Olympic Games begin?
6th Century B.C., 1st Century A.D., 15th Century A.D., 19th Century A.D., 20th Century A.D., None of these.
48. Which form of popular music originated from Storeyville Jazz?
Beat Music; County & Western; Rhythm & Blues; Ballads; 'Trad' Jazz.
49. Which of the following statements most exactly defines 'automation'?
Machines doing the work of men; Mass production on a 'Line' system; Machines working to

- programme with the minimum of human control; Using robots in the factory; None of these
50. Which hobby activity can help you qualify for a the Duke of Edinburgh's Award?
- Photography; Netball; First Aid; Typewriting; Art; Model Making.

PART C. (Marks have been inserted for this Part, for Appendix V. only).

The questions in this section are exactly like those above, except that the choice is in each case between things you think ought to be done in a given situation. Please answer as honestly as you can: do NOT underline an answer just because you think it will 'please' the person reading the results. This section, about the same length as the last one, should also take you about 20 minutes to complete. Once again, underline the answer that you feel is the correct one.

1. You have to vote for the first time. Which should you do?
- Vote the opposite way to the way your father does; (1)
- Examine all party policies and vote for the one that is best for you; (4)
- Examine all party policies and vote for the one that is best for the country; (5)

Vote Labour, because you are
in the Trade Union; (3)

Vote Labour because you are
working class; (2)

Vote Liberal, so as to be
different; (2)

Vote the same way as your
father does; (1)

Vote Conservative, because
you never had it so good; (2)

2. You have finished a job
of work well ahead of time,
You have, as it happens,
a job you would like to
do for yourself. What
would you do?

Do your job, because your're
ahead of time anyway; (2)

Talk to your mates while you'r
waiting for another job, but
not do your job, because you'l
get into trouble if the
foreman catches you; (1)

Not risk doing your job, but
'slope off' for a smoke; (1)

Go and get the next job,
because that is what the firm
is paying you for. (5).

3. Material has been vanish-
ing from the factory, and
you know the man responsible. Inform the shop steward, who
What would you do?

Inform the foreman or shop
manager; (2)

Inform the shop steward, who
may be able to make the chief
see reason; (5)

- Speak up if you are directly asked during an investigation, but otherwise keep quiet. (2)
- Keep quiet, anyway, to protect your mate, and lie if you are asked about it. (1)
4. A friend has given you a copy of 'Lady Chatterley's Lover'. What would you do?
- Read it, because it is supposed to be a sexy book. (1)
- Read it, because of all the publicity (2)
- Look for the 'juicy bits' and leave the rest; (1)
- Look to see if it is worth reading, because professional critics have suggested that Lawrence was saying something important; (5)
- Not read it, because you 'never read things like that, (1).
5. Your latest girl-friend is mad about motor-bikes and won't look at you without one; but you tell her you are rather short of cash at present. She insists you must get one
- Check your other commitments and hire purchase costs, and get a motor-bike on h.p., but only if you are sure you can keep the payments up; (2)
- Get one on h.p. anyway,

just the same. What would you do?

6. Your Union has put in for a 10% pay rise. The employers have offered 5%. The Govt. has publicly stated that the economy will only stand an average growth rate of 4%. What Union action would you support?

7. You go into an otherwise empty cafe with your girl friend, and opposite you, you see an infirm old man, unable to manage his food properly and slobbering all down his chin in a nasty mess. What would you do?

because you can always find the money from somewhere; (1)
Save hard to get one for cash; (3)

Get a new girl-friend. (5)
To offer to accept only 4%; (3)
To accept the 5% offer; (5)
To attempt to obtain 10% if the firm will go that far, but be willing to accept 5% if need be; (3)

To refuse anything below 10%, but keep negotiations open; (2)
To strike until 10% is offered (1)

Sit it out, hoping he will soon go (1)
Look the other way; (1)
Get up and take your girl elsewhere; (2)

Suggest to your girl that she offers to help the old man, because that sort of thing is women's work; (3)

8. Your employer has sent you on a course on Day Release, with wage and expenses paid. What would you do?

Go over and offer to help the old man, because your girl will be impressed; (4)
Go over and offer to help the old man, because he needs it. (5)

Attend, but not bother much, because you'll be recognised as a skilled man on coming out of your time anyway; (1)

Work during the time you're paid for, but make no attempt to do homework, for which you don't get paid; (2)

Work at the engineering subjects only, because they may help you to get a better job; (3)

Work at all subjects, since presumably the College concerned has a reason for including them; (5)

Work at the things that interest you and leave the rest; (4)

9. A coloured family moves in next door to you, and you soon find they tend to make a lot of noise late at night. What would you do?

Grumble to the other neighbours about those 'black so & so's'; (1)
 Inform the landlord and ask for something to be done; (1)
 Have as little to do with them as possible; (2)
 Remember that in their homeland this may be quite normal and put up with it; (4)
 Try and make friends with them, hoping they will see how English people live and act accordingly; (5)
 Try and make friends with them, hoping to be invited to the parties yourself; (2)
 Tackle them about it directly (4).

10. You are with your girl friend at a dance, and an obviously rather drunk man keeps trying to ask her to dance with him. What would you do?

Tell him, quietly but firmly, that she is with you; (5)
 Take him over to the bar, buy him a drink, and leave him with it; (3)
 Knock him down; (1)

11. All the popshows are boosting a certain group, to which your parents object. What would you do?

Call the 'bounders'; (2)

Persuade your girlfriend to go home a little earlier than usual; (4)

Buy their records, because they are 'for you', and your parents are bound to be 'square'. (1)

Buy their records, because what everybody says is good must be good. (1)

Buy their records, but only if you like the group's personality. (2)

Buy their records, because you believe this group to be good performers. (4)

Buy only those records that you have heard and like. (5)

Not buy any records, because you don't want to be the same as everybody else. (1)

Not buy any records, because to do so would annoy your parents. (4)

12. You have just married, and your wife has given up work to move into your new house, away from her home area. What would you do about your wages?

Give her housekeeping and keep the rest. (1)
 Give her house keeping and a personal allowance. (3)
 Hand your pay-packet over. (1)
 Take out 'keepie-back', and hand over the rest. (1)
 Sit down with her and work out a weekly budget, including spending money for each of you. (5)

Put the money in a joint bank account, and let each have a cheque book. (3)

13. The Students Union is putting on a concert of classical music, a subject about which you know little or nothing, though you are quite fond of lighter music. What would you do?

Stay away, in case you wouldn't like it. (3)

Stay away because it's bound to be 'square' (1)

Stay away, for fear the other will laugh at you for going. (1)

Stay away, because that sort of thing isn't working-class. (2)

Go, to support the Union. (4)

Go, because you like other music, and this might for all

14. You hear from a mate at work that a new employee once attended a mental hospital as a voluntary patient. What would you do?

you know be interesting.(5)
Go, because people will think you are well educated if you do. (1)

Have nothing to do with him, because once a loony always a loony. (2)

Go out of your way to make friends with him, because you feel sorry for him. (3)
Treat him exactly as you would treat anyone else. (4)

Broadly speaking, treat him like anyone else, but without letting him see it keep a bit of an eye open for any signs of special subjects or remarks that seem to upset him, so as to avoid them. (5)

Make fun of him to the other (1)

15. Pick the newspaper you would prefer to read.

One with plenty of pictures. (1)

One with plenty of sport (2)

16. A man in your shop, for reasons of his own, leaves his Union. What would you do?
- A 'tabloid', because it's easier to carry about. (1)
 One with simple English. (2)
 One with accurate news, without bias. (5)
 One with the facts interpreted for you by editorial remarks in with the news. (2)
 One that supports your political party. (3)
 Take no notice; It's his own business, after all. (5)
 Try and persuade him to rejoin in the interests of working-class solidarity. (4)
 Join in with a threat to strike if the man isn't sacked. (1)
 Remind the shop-steward of Rookes v. Barnard, and suggest he'd better leave well alone. (2).
17. You and your fiancee are engaged in buying furniture for your future home. You come to the washing machine stand. What would you prefer to do?
- Take the one most advertised. (1)
 Take the cheapest one. (2)
 Take the one immediately available in her favourite colour. (3).

- Take the most exclusive looking model. (2)
- Take the one recommended in the 'Which' survey. (5)
- Take the one with the most favourable H.P. terms. (4)
- Take the one the salesman is most eager to sell you. (1)
- Find a part-time job. (3)
- Watch television. (2)
- Mooch around, feeling bored (1)
- Help with household chores. (3)
- Go out to the pub or dogs more (2).
- Go out to more entertainment. (3)
- Take up some extra, new creative sport or hobby. (5)
- Read. (3)
- Grow show leeks, etc. (3)
- Disarm unilaterally, because we can always depend on the U.S.A. (1)
- Disarm unilaterally, to show the rest of the world an example. (2)
18. Your working week, during the next few years, is very likely to be greatly reduced by automation. How will you cope with this?
19. Imagine you have been made Prime Minister. Which of the following lines will you take over defence?

Keep only the minimum defences, and spend the rest on social welfare. (3)

Build up defences as much as possible, and take a tough line with all and any opponents. (1)

Build up defences as much as possible, and try to hold the balance between USA and Russia. (3)

Keep defences much as they are for the moment, but work towards a treaty of general world disarmament. (5)

20. You are asked by your Social Studies teacher to write up a report on a controversial topic (e.g., the contraceptive pill, smoking and lung cancer, etc.) How would you go about it?

Just put your opinions down; you have a right to them. (1)

Put down your opinions and explain why you hold them (3)

Look up the facts in reference books etc., and deduce your opinions from them. (5)

Look up the facts, but give no opinions because the subject is controversial. (3)

APPENDIX VIData Tables on Student Assessment.(for use with Chapter Seven)

Note: In these tables, the expected null frequency is shown immediately against the observed frequency, in brackets.

Control GroupTable P.1: Students Grouped By Course.

P.1.B:	<u>Craft</u>	<u>Tech./ONC</u>	<u>Total</u>
Above 35%	21 (26.11)	13 (7.89)	34
Below 35%	65 (59.89)	13 (18.11)	78
Total	86	26	112

Yates' Binomial Correction Used 1 D.F.

 χ^2 - 5.888 Significant P approx. 0.02

P.1.C:	<u>Craft</u>	<u>Tech./ONC</u>	<u>Total</u>
Above 80%	16 (16.13)	5 (4.87)	21
70-79%	25 (27.65)	11 (8.35)	36
60-69%	18(17.66)	5 (5.34)	23
Below 60%	27(24.56)	5 (7.44)	32
Total	86	26	112

 χ^2 - 2.17 Not significant

(In the tables that follow, not all students returned answers on their groupings in Part 'A')

Table P.2: Students Grouped by Age.

P.2.B:	<u>Below 17</u>	<u>17 - 19</u>	<u>Over 19</u>	<u>Total</u>
Above 35%	5 (9.71)	20 (16.65)	8 (6.64)	33
Below 35%	27 (22.29)	35 (38.35)	14 (15.36)	76
Total	32	55	22	109
2 D.F.	χ^2 - 4.73	P approx. 0.1		Not significant

P.2.C:	<u>Below 17</u>	<u>17 - 19</u>	<u>Over 19</u>	<u>Total</u>
Above 60%	20 (22.6)	42 (38.86)	15 (15.54)	77
Below 60%	12 (9.4)	13 (16.14)	7 (6.46)	32
Total	32	55	22	109
2 D.F.	χ^2 - 1.947			Not significant

Table P3: Students Grouped By Education

-- (88% of the sample left school at 15 plus)

P.3.B:	<u>Without Qln.</u>	<u>With Qln.</u>	<u>Total</u>
Above 40%	5 (10.37)	15 (9.63)	20
35-39%	9 (7.26)	5 (6.74)	14
30-34%	14 (15.55)	16 (14.45)	30
Below 30%	28 (22.82)	16 (21.18)	44
Total	56	52	108
3 D.F.	χ^2 - 9.272	Significant	

P.3.C:	<u>Without Qln.</u>	<u>With Qln.</u>	<u>Total</u>
Above 80%	5 (10.47)	15 (9.53)	20
70-79%	18 (18.32)	17 (16.68)	35
60-69%	9 (10.89)	12 (10.11)	21
Below 60%	24 (16.08)	7 (14.92)	31
Total	56	51	107
3 D.F.	χ^2 - 14.796	High significant ++	

Table P.4: Students Grouped by Home Environment Total

P.4B:	<u>Terrace</u>	<u>Council</u>	<u>Private</u>	<u>Total</u>
Above 35%	8 (4.766)	13 (18.11)	13 (11.124)	34
Below 35%	7 (10.234)	44 (38.89)	22 (23.876)	73
Total	15	57		107

2 D.F. $X^2 = 5.793$ P approx. 0.06 Almost significant.

P.4.C:	<u>Terrace</u>	<u>Council</u>	<u>Private</u>	<u>Total</u>
Above 70%	9 (7.991)	30 (30.65)	18 (18.359)	57
Below 70%	6 (7.009)	27 (26.35)	17 (16.641)	50
Total	15	57	35	107

2 D.F. $X^2 = 0.317$ Not significant.

Table P.5: Students Grouped by Father's Profession/Occupation

P.5B:	<u>Unskilled/ Semi Skilled</u>	<u>Skilled</u>	<u>F'Man/Man/ Prof.</u>	<u>Total</u>
Above 40%	6 (5.616)	5 (5.788)	5 (4.596)	16
30-39%	14 (14.74)	18 (15.19)	10 (12.07)	42
Below 30%	13 (12.644)	11 (13.022)	12 (10.334)	36
Total	33	34	27	94

4 D.F. $X^2 = 1.663$ Not significant.

P.5.C:	<u>Unskilled/ SemiSkilled</u>	<u>Skilled</u>	<u>F'Man/Man/ Prof.</u>	<u>Total</u>
Above 70%	20 (16.85)	15 (17.36)	13 (13.79)	48
60-69%	6 (7.021)	7 (7.235)	7 (5.744)	20
Below 60%	7 (9.129)	12 (9.405)	7 (7.466)	26
Total	33	34	27	94

4 D.F. $X^2 = 3.664$ Not significant

Table P.6: Students grouped by sibling relationships.

P.6B:	<u>Only Child</u>	<u>Brothers</u>	<u>Sisters</u>	<u>Both</u>	<u>Total</u>
Over 35%	9 (7.85)	15 (10.14)	5 (7.52)	6(9.49)	35
Below 35%	15 (16.15)	16 (20.86)	18(15.48)	23(19.51)	72
Total	24 2	31	23	29	107
3 D.F.	$X^2 = 6.874$		P approx. 0.08		Almost significant
P.6.C:	<u>Only Child</u>	<u>Brothers</u>	<u>Sisters</u>	<u>Both</u>	<u>Total</u>
Above 60%	16 (17.72)	25 (22.89)	17(16.97)	21(21.42)	79
Below 60%	8 (6.28)	6 (8.11)	6(6.03)	8 (7.58)	28
Total	24 2	31	23	29	107
3 D.F.	$X^2 = 1.423$		Not significant.		

Table P.7: Students grouped by courtship activities.

P.7.B:	<u>No girl- friend</u>	<u>Casual Rlns</u>	<u>Steady/Married</u>	<u>Total</u>
Above 35%	13 (10.15)	11 (12.95)	11 (11.9)	35
30-34%	8 (8.12)	9 (10.36)	11 (9.52)	28
Below 30%	8 (10.73)	17 (13.69)	12 (12.58)	37
Total	29 2	37	34	100
4 D.F.	$X^2 = 3.094$		Not significant.	
P.7.C:				
Above 70%	21 (15.95)	18 (20.35)	16 (18.7)	55
Below 70%	8 (13.05)	19 (16.65)	18 (15.3)	45
Total	29 2	37	34	100
2 D.F.	$X^2 = 5.022$		P.approx.0.08 Almost significant.	

Table P.8: Students grouped by Religion.

P.8.B:	C. of E.	<u>Others</u>	<u>None</u>	<u>Total</u>
Above 35%	10 (10.59)	6 (7.06)	14 (12.35)	30
30-34%	10 (8.82)	5 (5.88)	10 (10.3)	25
Below 30%	10 (10.59)	9 (7.06)	11 (12.35)	30
Total	30	20	35	85
4 D.F.	$\chi^2 - 1.202$		Not significant.	

P.8.C:

Above 70%	14 (15.53)	13 (10.35)	17 (18.12)	44
Below 70%	16 (14.47)	7 (9.65)	18 (16.88)	41
Total	30	20	35	85
2 D.F.	$\chi^2 - 1.862$		Not significant.	

Table P.9: Students grouped by working mother

P.9.B:	<u>Yes</u>	<u>No</u>	<u>Total</u>
Above 40%	5 (6.43)	13 (11.57)	18
35-39%	5 (5.0)	9 (9.0)	14
30-34%	10 (9.64)	17 (17.36)	27
Below 30%	15 (13.93)	24 (25.07)	39
Total	36	63	98
3 D.F.	$\chi^2 - 0.639$		Not significant.

P.9.C:

Above 80%	6 (6.43)	12 (11.57)	18
70-79%	13 (12.5)	22 (22.5)	35
50-69%	9 (10.72)	21 (19.28)	30
Below 50%	7 (5.35)	8 (9.65)	15
Total	36	63	98
3 D.F.	$\chi^2 - 1.296$		Not significant.

Table P.10: Students grouped by journey time to/from work.

P.10.B:	Short (under 20 mins)	Medium (20-40 mins)	Long	Total
Above 35%	11 (10.42)	8 (8.84)	11 (10.74)	30
30-34%	10 (9.03)	6 (7.64)	10 (9.33)	26
Below 30%	12 (13.55)	14 (11.52)	13 (13.93)	39
Total	33	28	34	95
4 D.F.	$X^2 - 1.452$		Not significant.	

P.10.C.

Above 70%	17 (18.06)	15 (15.33)	20 (18.61)	52
60-69%	8 (6.6)	5 (5.6)	6 (6.8)	19
Below 60%	8 (8.34)	8 (7.07)	8 (8.59)	24
Total	33	28	34	95
4 D.F.	$X^2 - 0.805$		Not significant.	

Table P.11: Students grouped by Youth Activities

P.11.B:	<u>Youth Clubs & C.</u>	<u>No Communal Act.</u>	<u>Total</u>
Above 40%	9 (11.75)	11 (8.25)	20
35-39%	8 (7.64)	5 (5.36)	13
30-34%	19 (16.45)	9 (11.55)	28
20-29%	15 (14.69)	10 (10.31)	25
Below 20%	6 (6.47)	5 (4.53)	11
Total	57	40	97
4 D.F.	$X^2 - 4.228$		Not significant.

P.11.C:	<u>Youth Clubs & C.</u>	<u>No Communal Act.</u>	<u>Total</u>
Above 80%	11 (9.4)	5 (6.6)	16
70-79%	15 (19.98)	19 (14.02)	34
50-69%	24 (18.8)	8 (13.2)	32
Below 50%	7 (8.82)	8 (6.18)	15
Total	57	40	97
	²		
3. D.F.	X - 7.963	Significant	+

Table P.12: Students grouped by Hobby Activities.

('Hobby Only' and Bravado answers ('women', 'beer', &c.) for the control group were too few to be amenable to statistical analysis, and have been omitted from this table)

P.12.B:	<u>Nil/Sport Only</u>	<u>Sport & Hobby</u>	<u>Total</u>
Above 40%	5 (5.88)	13 (12.12)	18
35-39%	5 (4.58)	9 (9.42)	14
30-34%	11 (9.48)	18 (19.52)	29
Below 30%	13 (14.06)	30 (28.94)	43
Total	34	70	104
	²		
3 D.F.	X - 0.733	Not significant.	

P.12.C:			
Above 80%	6 (6.94)	15 (14.06)	21
70-79%	9 (11.55)	26 (23.45)	35
60-69%	8 (7.26)	14 (14.74)	22
Below 60%	11 (8.25)	14 (16.75)	25
Total	34	69	103
	²		
3 D.F.	X - 2.488	Not significant	

Table P.13: Students grouped by Course Organisation (Craft students only)

P.13.B:	<u>FT/BR</u>	<u>P.T.D.</u>	<u>Total</u>
Above 40%	5 (4.07)	5 (5.93)	10
35-39%	6 (4.48)	5 (6.52)	11
30-34%	9 (9.36)	14 (13.64)	23
Below 30%	15 (17.09)	27 (24.91)	42
Total	35	51	86
3 D.F.	χ^2 - 1.683	Not significant.	
P.13.C:			
Above 80%	9 (6.51)	7 (9.49)	16
70-79%	11 (10.17)	14 (14.83)	25
60-69%	10 (7.33)	8 (10.67)	18
Below 60%	5 (10.99)	22 (16.01)	27
Total	35	51	86
3 D.F.	χ^2 - 8.865	P approx. 0.035	Significant ⁺

Experimental GroupTable Q.1: Social Studies vs. Control: Whole Group.

Q.1.B:	<u>Experimental</u>	<u>Control</u>	<u>Total</u>
Above 40%	111 (101.4)	20 (29.6)	131
35-39%	52 (51.1)	14 (14.9)	66
30-34%	102 (104.5)	33 (30.5)	135
20-29%	83 (89.1)	32 (25.9)	115
Below 20%	36 (37.9)	13 (11.1)	49
Total	384	112	496

4 D.F. X^2 - 6.632 P approx. 0.15 Not significant.

Q.1.C:

Above 80%	60 (62.34)	21 (18.66)	81
70-79%	88 (95.43)	36 (28.57)	124
60-69%	104 (97.74)	23 (29.26)	127
50-59%	37 (39.25)	14 (11.75)	51
40-49%	33 (30.78)	7 (9.22)	40
Below 40%	52 (48.46)	11 (14.54)	63
Total	374	112	486

4 D.F. X^2 - 7.043 Not significant.

Table Q.2: Social Studies vs. Control: Craft

Q.2.B:	<u>Experimental</u>	<u>Control</u>	<u>Total</u>
Above 40%	26 (23.95)	10 (12.05)	36
35-39%	13 (15.97)	11 (8.03)	24
30-34%	52 (49.91)	23 (25.09)	75
20-29%	54 (55.24)	29 (27.76)	83
Below 20%	26 (25.93)	13 (13.07)	39
Total	171	86	257

4 D.F. X^2 Not significant

Q.2.C:	<u>Experimental</u>	<u>Control</u>	<u>Total</u>
Over 80%	11 (17.75)	16 (9.25)	27
70-79%	28 (34.84)	25 (18.16)	53
60-69%	45 (41.41)	18 (21.59)	63
50-59%	23 (22.36)	11 (11.64)	34
40-49%	23 (19.06)	6 (9.94)	29
Below 40%	35 (29.58)	10 (15.42)	45
Total	165	86	251
5 D.F.	χ^2 - 17.642		++

Highly significant

(It should be noted that this distribution is adverse)

Table Q.3: Social Studies vs. Control - Technicians/ONC

Q.3.B:	<u>Social Studies</u>	<u>Control</u>	<u>Total</u>
Above 35%	124 (122.1)	13 (14.9)	137
Below 35%	89 (90.9)	13 (11.1)	102
Total	213	26	239
1 D.F.	χ^2 (uncorrected) - 0.637		Not significant.

(BUT this result may not be trustworthy: se Q.4.B. The split here is rather crude to give an effective measurement, and the experimental/control ratio higher than usual)

Q.3.C:	<u>Social Studies</u>	<u>Control</u>	<u>Total</u>
Above 80%	49 (48.01)	5 (6.99)	54
70-79%	60 (63.14)	11 (7.86)	71
60-69%	59 (56.92)	5 (7.08)	64
Below 60%	41 (40.93)	5 (5.07)	46
Total	209	26	235
3 D.F.	χ^2 - 2.748		Not significant.

Table Q.4: Experimental group, by type of course.

Q.4.B:	<u>Craft</u>	<u>Technicians/ONC</u>	<u>Total</u>
Above 40%	26 (49.43)	85 (61.57)	111
35-39%	13 (23.16)	39 (28.84)	52
30-34%	52 (45.41)	50 (56.59)	102
20-29%	54 (36.97)	29 (46.03)	83
Below 20%	26 (16.03)	10 (19.97)	36
Total	171	213	384
	χ^2		
4 D.F.	X - 41.649	P Approx. 0.001	High Significant ++

Q.4.C:			
Above 80%	11 (26.47)	49 (33.53)	60
70-79%	28 (38.83)	60 (49.17)	88
60-69%	45 (45.87)	59 (58.13)	104
50-59%	23 (16.32)	14 (20.68)	37
40-49%	23 (14.35)	10 (18.45)	33
Below 40%	35 (22.96)	17 (29.04)	52
Total	165	209	374
	χ^2		
5 D.F.	X - 46.593	P approx. 0.001	High Significant ++

Table Q.5: Experimental group, by previous education.

Q.5.B:	<u>No Qln.</u>	<u>Qln at 15+</u>	<u>Qln at 16+</u>	<u>Total</u>
Above 50%	9 (16.9)	12 (9.38)	12 (6.72)	33
40-49%	29 (38.91)	26 (21.6)	21 (15.49)	76
35-39%	24 (27.65)	14 (15.35)	16 (11.0)	54
30-34%	54 (49.16)	32 (27.29)	10 (19.55)	96
Below 30%	75 (58.38)	22 (32.38)	17 (23.24)	114
Total	191	106	76	373
	χ^2			
8 D.F.	X ² - 30.885		High Significant ++	

Q.5.C:	<u>No Qln.</u>	<u>Qln at 15+</u>	<u>Qln at 16+</u>	<u>Total</u>
Above 80%	18 (31.07)	26 (16.75)	16 (12.18)	60
70-79%	42 (45.03)	21 (17.68)	21 (17.68)	87
60-69%	48 (52.28)	25 (20.53)	25 (20.53)	101
40-59%	50 (38.3)	7 (15.05)	7 (15.05)	74
Below 40%	33 (24.32)	6 (9.56)	6 (9.56)	47
Total	191	75	75	369

8 D.F. X^2 - 28.905 P approx. 0.001 High Significant ++

Table Q.6: Experimental Group by Youth Activities

Q.6.B:	<u>Youth Clubs &c.</u>	<u>No Activities</u>	<u>Total</u>
Above 40%	46 (50.66)	55 (50.34)	101
35-39%	24 (21.06)	18 (20.94)	42
30-34%	44 (41.13)	38 (40.87)	82
20-29%	35 (37.61)	40 (37.39)	75
Below 20%	13 (11.54)	10 (11.46)	23
Total	162	161	323

4 D.F. X^2 - 2.819 Not significant.

Q.6.C:

Above 80%	29 (26.83)	24 (26.17)	53
70-79%	35 (38.48)	41 (37.52)	76
60-69%	55 (46.58)	37 (45.42)	92
50-59%	10 (15.19)	20 (14.81)	30
40-49%	13 (13.68)	14 (13.32)	27
Below 40%	18 (19.24)	20 (18.76)	38
Total	160	156	316

5 D.F. X^2 - 7.874 P. approx. 0.18 Not significant.

Table Q.7: Youth Club students from Q.6.C against control equivalent.

Q.7.C:	<u>Experimental</u>	<u>Control</u>	<u>Total</u>
Above 80%	29 (29.49)	11 (10.51)	40
70-79%	35 (36.86)	15 (13.14)	50
50-69%	65 (65.61)	24 (23.39)	89
Below 50%	31 (28.04)	7 (9.96)	38
Total	160	57	217

3 D.F. $\chi^2 - 1.602$ Not significant.

Table Q.8: Students grouped by course organisation: Craft only

Q.8.B:	<u>FT/BR</u>	<u>P.T.D.</u>	<u>Total</u>
Over 35%	7 (4.324)	36 (38.676)	43
Below 35%	11 (13.676)	125 (122.324)	136
Total	18	161	179

$\chi^2 - 2.132$ P approx. 0.15 Not significant.

Q.8.C:

Over 70%	7 (3.77)	34 (37.23)	41
Below 70%	9 (12.23)	124 (120.77)	133
Total	16	158	174

Yates' Binomial Correction used. 1 D.F.

$\chi^2 - 3.551$ P approx. 0.06 Almost significant.

Table Q.9: Experimental & Control groups compared for Q.8.B.

<u>FT/BR</u>	<u>Experimental</u>	<u>Control</u>	<u>Total</u>
Above 35%	7 (6.113)	11 (11.887)	18
Below 35%	11 (11.887)	24 (23.113)	35
Total	18	35	53

Yates' Binomial Correction used.

$\chi^2 - 0.413$ Not significant

<u>P.T.D.</u>	<u>Experimental</u>	<u>Control</u>	<u>Total</u>
Above 40%	24 (22.03)	5 (6.97)	29
35 - 39%	12 (12.91)	5 (4.09)	17
30-34%	49 (47.84)	14 (15.16)	63
20-29%	53 (52.4)	16 (16.6)	69
Below 20%	23 (25.82)	11 (8.18)	34
Total	161	51	212

4 D.F. $\chi^2 - 2.425$ Not significant

Table Q.10: Students grouped by course organisation: Tech/ONC

<u>Q.10.B.</u>	<u>FT/BR</u>	<u>P.T.D.</u>	<u>Total</u>
Above 40%	12 (10.33)	73 (74.67)	85
35-39%	8 (4.61)	30 (33.39)	38
Below 35%	6 (11.06)	85 (79.94)	91
Total	26	188	214

2 D.F. $\chi^2 - 5.673$ P. approx 0.06 Almost significant.

Q.10.C:

Above 80%	7 (6.09)	42 (42.91)	49
70-79%	7 (7.46)	53 (52.54)	60
Below 70%	12 (12.45)	88 (87.55)	100
Total	26	183	209

2 D.F. $\chi^2 - 0.241$ Not significant.

Table Q.11: Experimental Group, By Age

Q.11.B:	<u>15 - 17</u>	<u>17 plus</u>	<u>18 plus</u>	<u>19 plus</u>	<u>20 plus</u>	<u>Total</u>
Above 40%	22 (22.35)	20(22.44)	17(21.56)	15(16.62)	35(23.03)	107
35-39%	9 (11.87)	9(10.5)	10(10.09)	9(7.77)	14(10.77)	51
30-34%	22 (23.26)	16(20.59)	21(19.78)	22(15.24)	19(21.13)	100
Below 30%	34 (26.52)	32(23.47)	26(22.57)	11(17.37)	11(24.07)	114
Total	87	77	74	57	79	377
12 D.F.	$X^2 - 31.455$		Highly Significant			++

Q.11.C:

Above 80%	13 (14.02)	10(12.53)	13(11.54)	8(9.21)	16(12.7)	60
70-79%	14 (20.32)	15(18.17)	17(16.73)	17(13.38)	24(18.4)	87
60-69%	28 (24.05)	24(21.5)	20(19.81)	13(15.85)	18(21.79)	103
40-59%	19 (15.41)	21(13.78)	10(12.69)	6(10.16)	10(13.96)	66
Below 40%	11 (11.2)	6(10.02)	10(9.23)	12(7.4)	9(10.15)	48
Total	85	76	70	56	77	364
16 D.F.	$X^2 - 23.77$		P Approx. 0.08			Almost significant.

Table Q.12: Maximum age-groups. Experimental vs. Control(Overl

Q.12.B:	<u>Experimental</u>	<u>Control</u>	<u>Total</u>
Above 35%	73 (69.71)	8 (11.29)	81
Below 35%	63 (66.29)	14 (10.71)	77
Total	136	22	158

Yates' Binomial Correction used.

 $X^2 - 2.328$ P approx. 0.12 Not significant.

Q.12.C:

Above 70%	65 (66.94)	13 (11.06)	78
Below 70%	68 (66.06)	9 (10.94)	77
Total	133	22	155

1 D.F. Yates' Binomial Correction used $X - 0.852$ Not Significant

Table Q.13: Experimental group, by courtship activities.

Q.13.B:	<u>No Girl-Friend</u>	<u>Casual Rlns.</u>	<u>Steady/Married</u>	<u>Total</u>
Above 50%	6 (7.49)	10 (10.55)	17 (14.96)	33
40-49%	15 (16.33)	20 (23.09)	37 (32.58)	72
35-39%	10 (11.12)	21 (15.64)	18 (22.24)	49
30-34%	22 (21.55)	38 (30.23)	35 (43.22)	95
20-29%	19 (18.38)	19 (25.86)	43 (36.76)	81
Below 20%	9 (6.13)	6 (8.63)	12 (12.24)	27
Total	81	114	162	357
	2			
10 D.F.	X - 13.103	Not significant.		

Q.13.C:

Above 80%	15 (12.15)	17 (17.01)	21 (23.84)	53
70-79%	22 (20.18)	22 (28.24)	44 (39.58)	88
60-69%	17 (22.7)	37 (31.77)	45 (44.53)	99
50-59%	9 (7.56)	8 (10.59)	16 (14.85)	33
Below 50%	17 (17.41)	28 (24.39)	31 (34.2)	76
Total	80	112	157	349
	2			
8 D.F.	X - 7.774	Not significant.		

Table Q.14: Experimental Group vs. Control Group, by Courtship,

Q.14.C:	<u>Steady/Married only.</u>		<u>Total</u>
	<u>Experimental</u>	<u>Control</u>	
Above 80%	21 (23.02)	7 (4.98)	28
70-79%	44 (43.57)	9 (9.43)	53
60-69%	45 (42.75)	7 (9.25)	52
50-59%	16 (18.08)	6 (3.92)	22
Below 50%	31 (29.58)	5 (6.42)	36
Total	157	34	191
4 D.F.	X = 3.412	Not significant.	

Table Q.15: Experimental Group, classified by home environment

Q.15.B:	Terrace House	<u>Council Accom.</u>	<u>Private Hs.</u>	<u>Total</u>
Above 50%	8 (6.98)	11 (16.39)	11 (6.63)	30
40-49%	23 (17.67)	37 (41.54)	16 (16.79)	76
35-39%	11 (10.23)	23 (24.05)	10 (9.78)	44
30-34%	20 (20.92)	52 (49.18)	18 (19.9)	90
20-29%	13 (17.91)	48 (42.08)	16 (17.01)	77
Below 20%	5 (6.29)	17 (14.76)	5 (5.95)	27
Total	80	188	76	344

10 D.F. $\chi^2 = 10.43$ Not significant.

Council House, Experimental vs Control:

	<u>Experimental</u>	<u>Control</u>	<u>Total</u>
Above 35%	71 (64.46)	13 (19.54)	84
Below 35%	117 (123.54)	44 (37.46)	161
Total	188	57	245

Yates' Binomial Correction used.

1 D.F.

$$\chi^2 = 4.478$$

Significant

Table Q.16: Experimental Group, by sibling relationships.

Q.16.B:	<u>Only Child</u>	<u>Brothers</u>	<u>Sisters</u>	<u>Both Sib</u>	<u>Total</u>
Above 50%	11(6.623)	8(7.827)	7(6.88)	6(10.67)	32
40-49%	15(15.94)	17(18.84)	17(16.56)	28(25.66)	77
35-39%	8(10.76)	13(12.72)	15(11.18)	16(17.34)	52
30-34%	18(20.29)	20(23.97)	15(21.08)	45(32.66)	98
20-29%	19(16.97)	22(20.06)	21(17.64)	20(27.33)	82
Below 20%	6(6.417)	11(7.583)	5(6.66)	9(10.34)	31
Total	77	91	80	124	372

15 D.F. $\chi^2 = 20.925$ P approx., . 0.15 Not significant

Table Q.17: Sibling relationships, experimental vs control groups.

Brothers:	<u>Experimental</u>	<u>Control</u>	<u>Total</u>
Above 35%	38 (39.53)	15 (13.47)	53
Below 35%	53 (51.47)	16 (17.53)	69
Total	91	31	122

Yates' Binomial Correction used. 1 D.F. $X^2 = 0.43$ Not significant

Sisters:

Above 35%	39 (34.18)	5 (9.82)	44
Below 35%	41 (45.82)	18 (13.18)	59
Total	80	23	103

Yates' Binomial Correction used: 1 DF $X^2 = 5.462$ Significant

Only Children:

Above 35%	34 (32.78)	9 (10.22)	43
Below 35%	43 (44.22)	15 (13.78)	58
Total	77	24	101

Yates' Binomial Correction used. 1 D.F. $X^2 = 0.356$ Not Signifi.

Brothers & Sisters:

Above 35%	50 (45.38)	6 (10.62)	56
Below 35%	74 (78.62)	23 (18.38)	97
Total	124	29	153

Yates' Binomial Correction used. 1 D.F. $X^2 = 4.1$ Significant

Table Q.18: Experimental Group, Craft students by colleges.

Q.18.B:	<u>G'head</u>	<u>Hebburn</u>	<u>Stockton</u>	<u>W.H'pool</u>	<u>Total</u>
Above 35%	15(22.76)	7(2.37)	5(5.69)	14(10.18)	41
Below 35%	81(73.24)	5(9.63)	19(18.31)	27(30.82)	132
Total	96	12	24	41	173

3 D.F. $X^2 = 16.645$ P approx 0.001 High Significant⁺⁺

Q.18.C:	<u>G'Head</u>	<u>Hebburn</u>	<u>Stockton</u>	<u>W.H'pool</u>	<u>Total</u>
Above 70%	17(22.46)	5(2.84)	7(4.73)	10(8.97)	39
Below 70%	78(72.54)	7(9.16)	13(15.27)	28(29.03)	126
Total	95	12	20	38	165

3 D.F. $X^2 = 5.475$ P approx. 0.15 Not significant.

Table Q.19: Experimental Group, Technician/ONC students by colleges.

Q.19.B:	<u>G'head</u>	<u>Hebburn</u>	<u>Stockton</u>	<u>W.H'pool</u>		<u>D'ton</u>	<u>Total</u>
Above 35%	45(52.38)	17(13.39)	15(17.46)	23.(16.89)		24(23.88)	124
Below 35%	45(37.62)	6(9.61)	15(12.54)	17(17.12)		17(17.12)	89
Total	90	23	30	29		41	213

4 D.F. $X^2 = 10.941$ P approx, 0.04 Significant +

Q.19.C:	<u>G'head</u>	<u>Hebburn</u>	<u>Stockton</u>	<u>W.H'pool</u>	<u>D'ton</u>	<u>Total</u>
Above 80%	16(20.17)	8(5.39)	7(7.03)	5(6.8)	13(9.61)	49
70-79%	21(24.69)	5(6.61)	11(8.61)	10(8.33)	13(11.76)	60
Below 70%	49(41.14)	10(11.0)	12(14.36)	14(13.87)	15(19.63)	100
Total	86	23	30	29	41	209

8 D.F. $X^2 = 8.74$ Not significant.

Table Q.20: Experimental Group, by Teaching Method.

Method	B	C	F	L	C:B:H	L:I:C (G only)	B:I:C	I:C	B:C	B:I (Tech only)	B:F	Total
<u>Q.20B.</u>												
Actual												
Above 35%	29	28	11	13	24	5	6	10	11	9	11	157
Below 35%	35	16	20	8	25	10	15	28	40	6	17	220
Total	64	44	31	21	49	15	21	38	51	15	28	377
Null												
Above 35%	26.66	18.32	12.91	8.75	20.41	6.25	8.75	15.82	21.24	6.25	11.64	157
Below 35%	37.34	25.68	18.09	12.25	28.59	8.75	12.25	22.18	29.76	8.75	16.36	220
Total	64	44	31	21	49	15	21	38	51	15	28	377
10 D.F.	$\chi^2 - 30.39$ (Q.20.B) P approximately 0.001							Highly Significant** (both results)				
	$\chi^2 - 33.099$ (Q.20.C)											
<u>Q.20.C</u>												
Actual												
Above 60%	49	38	23	13	28	10	16	15	25	8	21	246
Below 60%	13	7	8	7	19	5	5	20	26	7	5	122
Total	62	45	31	20	47	15	21	35	51	15	26	368
Null												
Above 60%	41.45	30.08	20.72	13.37	31.42	10.02	14.04	23.4	34.1	10.02	17.38	246
Below 60%	20.55	14.92	10.28	6.63	15.58	4.98	6.96	11.6	16.9	4.98	8.62	122
Total	62	45	31	20	47	15	21	35	51	15	26	368

Table Q.21: Craft students, available comparisons by methods.

Q.21.B:	<u>C</u>	<u>C:B:H</u>	<u>B:C</u>	<u>Total</u>
Above 35%	7 (3.14)	10 (8.38)	5(10.48)	22
Below 35%	5 (8.86)	22 (23.62)	35(29.52)	62
Total	12	32	40	84
2 D.F.	χ^2 - 10.731	Highly Significant		++

Q.21.C:	<u>B</u>	<u>F</u>	<u>C:B:H</u>	<u>I:C</u>	<u>B:C</u>	<u>Total</u>
Above 60%	8(6.38)	11(7.3)	14(13.68)	9(11.4)	15(18.24)	57
Below 60%	6(7.62)	5(8.7)	16(16.32)	16(13.6)	25(21.76)	68
Total	14	16	30	25	40	125
4 D.F.	χ^2 - 6.205	P approx, .0.15		Not significant.		

Table Q.22: Technicians, available comparisons by methods.

Q.22.B:	<u>B</u>	<u>C</u>	<u>F</u>	<u>L:I:C</u>	<u>I:C</u>	<u>B:I</u>	Total
Above 35%	9(7.745)	16(11.61)	7(8.3)	5(8.3)	6(7.45)	9(8.3)	52
Below 35%	5(6.255)	5(9.39)	8(6.7)	10(6.7)	8(6.255)	6(6.7)	42
Total	14	21	15	15	14	15	94
5 D.F.	χ^2 = 8.571	P approx 0.13		Not significant.			

Q.22.C:	<u>L:I:C</u>	<u>B:I</u>	<u>Total</u>
Above 60%	10 (9)	8 (9)	18
Below 60%	5 (6)	7 (6)	12
Total	15	15	30

Yates' Binomial Correction used.

L D.F.

$$\chi^2 - 0.694$$

Not significant.

Table Q.23: O.N.C. Students, available comparisons by method.

Q.23.B:	<u>B</u>	<u>C</u>	<u>B:F</u>	<u>B:C</u>	<u>Total</u>
Over 35%	18(17.68)	5(5.72)	10 (9.88)	6 (5.72)	39
Below 35%	16(16.32)	6(5.28)	9 (9.12)	5 (5.28)	36
Total	34	11	19	11	75
3 D.F.	χ^2	- 0.232	Not significant.		

Table Q.24: Experimental Group, by attitude to course.

Q.24.B:	<u>No Value</u>	<u>Little/Some</u>	<u>Definite Val.</u> (Significant)	<u>Blank</u> (Signi)	<u>Total</u>
Over 50%	5(4.88)	5(4.88)	17(12.95)	6(10.29)	33
40-49%	7(11.24)	10(11.24)	38(29.84)	21(23.68)	76
35-39%	11(7.69)	8(7.69)	25(20.41)	8(16.21)	52
30-34%	14(14.39)	15(14.39)	38(38.08)	30(30.14)	97
Below 30%	18(16.8)	17(16.8)	28(44.72)	51(35.68)	114
Total	55 ₂	55	146	116	372 ₄₊
12 D.F.	χ^2	- 26.92	P approx 0.008	Highly Significant	

Q.24.C:	(Signi.)	(Significant)			
Over 70%	12(21.61)	22(21.21)	66(55.78)	43(44.4)	143
60-69%	13(15.71)	17(15.43)	47(40.57)	27(32.29)	104
40-59%	17(10.13)	7(9.94)	20(26.14)	23(20.79)	67
Below 40%	13(7.55)	8(7.42)	9(19.51)	20(15.52)	50
Total	55 ₂	54	142	113	364 ₊
9 D.F.	χ^2	- 26.858	P approx 0.002	Highly significant	

(It should be noted that, throughout these tables, χ^2 has been used to test independent rather than goodness-of-fit. It is for this reason that certain non-significant values of P, which may nevertheless affect the discussion, have been quoted