The Industrial Training Act, 1964: Sunderland, a sample study

Winders, R

THE INDUSTRIAL TRAINING ACT, 1964

SUNDERLAND, A SAMPLE STUDY

MASTER OF EDUCATION THESIS

JULY 1966

by R. WINDERS

ABSTRACT

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The Industrial Training Act, 1964 was introduced in order to ensure that the future needs of industry would be met at all levels by personnel adequately trained and appropriately educated. The Act granted to the Minister of Labour (later the Secretary of State for Employment and Productivity) the power to establish a Central Training Council, and separate Industrial Training Boards for each branch of industry and commerce. Each board is authorised to raise a levy from employers within its scope and to pay grants to employers who undertake to provide training and associated education to the standards determined by the board. The educationl content is the responsibility of the Department of Education and Science through the Colleges of Further Education and of the Examining Bodies.

The first chapter describes the situation in 1964 and suggests criteria by which developments may be evaluated. In order to place these developments in perspective, the second chapter analyses briefly the evolution of training and technical education in Britain

with examples from Sunderland. The third chapter reviews the Act itself and details the powers which it embodies.

Three chapters examine the work of the Shipbuilding, Construction and Engineering Industrial Training Boards respectively In each the work of the Board is related to the aims and provisions of the Act and is illustrated by specific examples from Sunderland. Commercial and Clerical training is then considered in order to provide material for comparison.

The concluding chapters summarise the achievements between 1964 and 1968. An analysis is made with reference to the criteria of Chapter One. The general conclusion is that the Act creates a structure adequate to meet the needs, but the strengthening of its administration is required at both central and local levels to ensure that all employees in all industries are suitably trained and educated.

PREFACE

The purpose of this thesis is to examine the developments from the Industrial Training Act 1964 with particular reference to the changes in the Further Education system. The actual results achieved in the Sunderland district are used to illustrate this theme. Sunderland is a sample in the Geographer's sense - a specific area in which problems can be analysed in depth. This is not a sample in the statistical sense, though the local problems are related where appropriate to the national framework.

In December 1968 there were 26 established Industrial Training Boards, each of which produces information papers at various intervals. Comments upon these are made by a variety of bodies. There is no published review of overall developments, though the annual "Progress Reports" published by the British Association for Commercial and Industrial Education, and the official reports of the Central Training Council provide useful summaries. As far as possible the data in this thesis is accurate to December 1968. National Education statistics for 1966-7 and local statistics for 1967-8 (September to August) and Industrial Training Board schemes for the 1967-8 session (April to March) are included. Where possible minor revisions have been made to include data which became available between December 1968 and April 1969. These include summary totals from the "Statistics

of Education 1967-8" (Published April 1969,) and the Third Report of the Central Training Council (March 1969.) In April 1968 the Ministry of Labour became part of the Department of Employment and Productivity. The titles are used as appropriate for specific dates. Where a more general reference is made the form Ministry of Labour (D.E.P.) is used.

Footnotes are listed at the end of each chapter. References to publications are by author and date e.g. Tylecote 1957. Full details are given in the Bibliography.

This thesis could not have been written without the co-operation of many individuals in Sunderland and elsewhere. I am grateful in particular to the officers of the Industrial Training Boards, the Ministry of Labour (D.E.P.), the administrative and teaching staff of the three technical colleges and the members of many firms and business in the town. From all of these I have had unfailing assistance. I must also thank Mr. S. Turner of the University of Durham for his encouragement, as my tutor, throughout the period during which this thesis has been written.

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LIST OF APPENDICES

CHAPTER ONE

THE SITUATION IN 1964

The Industrial Training Act 1964 was designed to remedy deficiencies in training which had become apparent during the post-war period. Industrial training involves both practice in skills, and an educational programme designed to found these skills on an understanding of materials and processes. This foundation enables the trainee to appreciate changes in technology, and facilitates subsequent retraining. In Britain the further education colleges have been responsible for the educational content of training and many have also provided workshop facilities for skill training. This thesis attempts to assess the implications of the Industrial Training Act for these colleges. The Act became law on the 12th March, 1964. As an introduction to this study the problems apparent in the early 1960's are reviewed in this chapter. Some criteria by which the effectiveness of the Industrial Training Act may be judged are then suggested.

The 1962 White Paper "Industrial Training"[1] put forward proposals for discussion which, with modifications, became the Industrial Training Act. The problems listed were;

(1) A general shortage of skilled labour;

(2) A growing need for skilled labour in order to maintain planned growth;

(3) Lack of controls of quality of training;

(4) A need to train the increased number of school leavers;

(5) Inequalities of opportunity between firms and between industries;

(6) Costs of training borne by interested firms only.

The White Paper proposed that a series of Training Boards should be established. Each board would be responsible for training within its own industry. A board would take a levy from employers in order to finance the scheme. The problems of first year training were emphasised. A primary task for the boards would be to eliminate, "the haphazard and narrow training given all too often at the beginning."[2] The preliminary report contained in the White Paper was made in order to stimulate discussion and to promote co-operation in planning a new training structure between, "industry, the Government, and the education authorities." The modifications to these proposals which were made before the final Bill was passed were the result of discussions during the intervening two years. In 1963 the book "Apprenticeship in Europe; the lesson for Britain,"[3] provided further material for these discussions. In it Lady Williams makes a critical study of apprenticeship in Britain by

comparing the system with those in seven European Countries. She criticises the apprenticeship system in Britain for the inadequacy of the actual training given. Five years is the normal apprenticeship for most trades, from bricklaying to instrument making. In all of the European countries studied,[4] the length of training varies between skills and averages three years. Even after five years in Britain there is no guarantee that an apprentice has had a useful training. He may have been in a specialised firm doing only one type of work and without day release. If his "supervisor" was on piece work rates he would be unlikely to have been trained at all. Tests of competence during apprenticeship are compulsory in each of the countries except Sweden. The age at which apprenticeship begins is also variable. France in particular encourages retraining and qualifying of adults on special nine month courses.

Changes in apprenticeships will not by themselves solve the problem. Lady Williams also recommends changes in training methods in factories and colleges. A major problem in both is that realistic training machinery is expensive and may therefore often continue to be used even though it is outdated. This, coupled with the fact that lecturers are recruited normally for at least thirty years teaching, means that courses may become static. The resulting discrepancy between college work and

industrial practice frustrates the student and leads to considerable wastage. She recommends that syllabi should be frequently revised by joint committees from industry and education.

Proposals that Britain should enter the Common Market emphasised the need to bring British training to a standard which ensured "The complete vocational education and training of all those fitted for skilled and other occupations."[5]

In January 1963 the British Association for Commercial and Industrial Education (B.A.C.I.E.) held a conference on "Cmnd 1892: The Next Step." The speakers included the Minister of Labour,[6] Lady Williams, and the General Secretary of the Transport and General Workers' Union.[7] The Minister of Labour stated that though the number entering apprenticeships had risen by 6% in 1962, the proportion of the total age group had fallen from 37·9% to 36·2%[8]. He emphasised the importance of first year training and suggested that this might be provided by the new Boards. Lady Williams said that she was unhappy about the tone of the proposals in that they were "permissive instead of being compulsory."[9] She called for a legislative framework enforcing minimum standards. She concluded, "What I want to urge beyond everything else, beyond all the things that I have been proposing, is that end of apprenticeship tests should be considered an integral and essential part of Industrial Training

and should be so named in the Bill."[10] During discussion a tax on all employers was suggested in order to provide wages for apprentices indentured to Boards.[11] The T.G.W.U. representative also emphasised the problems of finance and called for a substantial investment by the Government in order to ensure inspection.[12] His major proposal was for a strong central body to ensure that the Boards fulfilled their responsibilities.[13] In discussion the Ministry of Labour representative argued against both a general tax and a central authority in that the strength of the proposals was "in the industry by industry approach."[14]

The debate continued at the B.A.C.I.E. conference a year later which was held within a month of the publication of the Act itself. The speeches at the conference summarise the Government position and the immediate reactions to the Bill.[15]

The Minister of Labour stated that the principal concern of each board was to attempt to predict manpower requirements in each sector of its industry. In this it would be assisted by other government departments. When the need had been assessed the board must then decide on the training policy necessary to meet the established need. The Minister described[16] the five tasks to be tackled by the boards as;

(1) To decide on the form of training, with special emphasis on off the job basic training;

(2) To analyse the skills required and to formulate training schedules;

(3) To determine the length of training required;

(4) To consider what further education courses are appropriate;

(5) To ensure the competence of each trainee.

The problems facing the boards and indeed the country as a whole were ably summarised by the Chairman of the Trades' Union Congress in his contribution to the conference.[17] "After nearly two centuries of industrial development we have to admit, now that this Act has been passed, that all of us - employers, Government Departments and Trade Unionists alike - have got to start from scratch in the sense of conscious planning as a coordinated industrial development."

The situation in 1964 has been reviewed above. The evolution of the system of training and further education which resulted in this situation is outlined in the next chapter. Since this thesis attempts to assess the effectiveness of the Act in a sample area, and to indicate some national implications, it is important here to suggest the criteria by which the success of the Act may be judged. These criteria may be stated for the nation, for each industry, for each employer and not least for each trainee.

(a) The ultimate measure of national progress is the relative prosperity of the country. This, in an ideal situation, would demand that each worker in the country was employed in an occupation which made full use of his innate abilities and that he had received training to enable him to perform his tasks efficiently and with satisfaction. The responsibility of each training board is therefore to ensure that at any time an adequate number of competent trainees is available. This would involve both forecasting of requirements and training to those requirements. A continuous training policy including basic theoretical education is essential to ensure that those who become redundant are able to be retrained for a growth sector. The training board must also ensure that the training is adequate in both time and content and that the individual is capable of performing the tasks for which he was trained. The traditional apprenticeship system in which the length of time served is often the only qualification is clearly inadequate.

(b) Each industry may expect that specific needs are met in both quantity and quality of training. This involves planning on a national scale to assess the relative importance and the growth potential of the industry. Within the industry each sector must be assured of fully competent personnel by forward planning of manpower requirements.

(c) The individual employer has a right to be informed of the developments which are likely to occur in his sector of the industry. From this he can assess his recruitment policy. He must be informed of the standards of competence required of each employee. The methods of training by which these standards can be achieved must be laid down. Since he is investing money in training he must be assured of a return in terms of skilled labour. Each employer must contribute towards training, in both time and money, in proportion to his needs.

(d) The boy or girl leaving school, and the worker who undergoes retraining, must be assured of a training which extends him to the limit of his abilities. He must be placed, trained and tested. The employer who is not willing to offer training facilities should not be allowed to employ trainees unless he is prepared to pay other firms or institutions to undertake their training for him. The employee who appreciates his contribution to the firm and understands his place in the organisation is likely to be more content, more stable, and even more productive. Induction training and periodic refreshers have a value even for the repetitive tasks which have to be performed.

The above criteria are those for an ideal situation. The Industrial Training Act enables progress to be made towards these ideals. The amount of change required and the investment involved

will determine the rate at which progress can be made. The implications of these changes for Further Education are the core of this thesis. The foundations laid in the Act itself and in the immediate developments from it are crucial. In order to assess the magnitude of the problems involved and the progress made between 1964 and 1968 this thesis examines in detail the development of further education in relation to industrial needs in Sunderland.

Some national problems can be illustrated from this case study. Three of the first five Industrial Training Boards to be established are major employers in the area. The industries of Sunderland reflect both the coalfield tradition and the new growth. The basic shipbuilding industry illustrates in some measure the problems of long established specialities, such as Cotton in Lancashire or Pottery in Stoke. The largest factory employs women on conveyor belt assembly typical of post war light industry. The major employing industry in common with the Northern Region and with the United Kingdom as a whole is Retail Distribution. Exemplified in acute form are the national problems of unemployment and industrial change. Sunderland has a population of over 200,000 and therefore represents the very large class of second order towns in Britain. The detailed study of trends in Sunderland can thus illuminate specific problems which may be of national significance. A similar study in other sample areas would be a valuable supplement to generalised national statistics.

The next chapter relates the development of further education in Sunderland to both national policy and local needs. In later chapters the local achievements within Shipbuilding, Construction and Engineering show how the relevant board's policies have been carried out in the field. The chapter on Commercial and Clerical training similarly compares local progress with the national policy of the Central Training Council as interpreted by the Boards. National achievements are an amalgam of local achievements. It is thus essential that local and regional studies are made available. Though articles about special courses in individual colleges have appeared from time to time, no integrated study of a particular area has been published.

Some of the problems apparent in 1964 have been stated. Criteria by which the extent to which these problems have been overcome can be judged, have been suggested. Where appropriate, studies of developments in the sample area will be made. Before summarising the scope of the 1964 Industrial Training Act, a brief survey of the preceding reports and legislation is necessary.

NOTES

(Books are listed by Author and date. Full titles and other details are included in the Bibliography.)

1. "Industrial Training" (cmnd 1892) HMSO 1962.
2. op. cit. p. 6.
3. Williams. 1963.
4. The countries studied were Western Germany, the Netherlands, France, Italy, Switzerland, Belgium and Sweden.
5. Williams 1963 p. 207 quoting from the schedules of training for Common Market Countries.
6. Rt. Hon. John Hare M.P.
7. Mr. Frank Cousins.
8. "Cmnd. 1892; The Next Step," B.A.C.I.E., January 1963. p.5.
9. p. 12.
10. p. 18.
11. p. 22.
12. p. 31.
13. p. 32.
14. p. 52.
15. "The Industrial Training Act." B.A.C.I.E. April 1964 pp 3 - 8.
16. pp. 5 - 6.
17. G.H. Lowthian. op. cit. p. 22.

CHAPTER TWO

THE DEVELOPMENT OF THE SYSTEM TO 1964

The Industrial Training Act is the most recent in a series of developments in industrial training. In order to assess the progress made in the four years since the Act some review of the developments leading up to it are necessary. The general history of Technical Education, which is the sector of training central to this thesis, has been well documented, notably in Argles' "South Kensington to Robbins."[1] It is sufficient here to give a brief summary of the major innovations at a national level. The actual results in Sunderland are throughout related to this framework. They emphasise the discrepancy between policy and reality which made the Industrial Training Act necessary.

The early legislation is embodied in Acts regulating apprenticeship. The Health and Morals of Apprentices Act of 1802 and the Factories Act of 1833 limited the working hours of apprentices and introduced some compulsory education for all young workers. Technical education was introduced after the Great Exhibition in 1851 under the auspices of the Science and Art Department. Payments were made to students and organisers on passing specified examinations. In Sunderland these payments supported a school of Navigation and a School of Art. Groups of workmen were also organising education in Mechanics Institutes.

From 1820 inspired by liberals like Brougham and Birkbeck the movement prospered.[2] In Sunderland there were a series of Institutes each of which flourished and withered within a few years.[3]

The First Act of Parliament dealing solely with Technical education was the Technical Instruction Act of 1889. The recently constituted Local Authorities were allowed to spend up to a 1d. rate for supplying Technical Education. This was supplemented by money from the Customs and Excise Act of 1890, usually known as the "Whiskey Money." A medley of institutions grew up. Many classes were held in "elementary" schools until this was declared illegal following a test case between a Government Auditor T.B. Cockerton and the London School Board. The system was regularised in the Education Act of 1902 in which Local Education Authorities were given control of all stages of education.

The state of Technical Education at the turn of the century is clearly shown in Sunderland. Pressure from local worthies including, R. Gordon Bell who had studied the system in Germany, led to the opening of a new Technical College in 1901. In the first session the income from the "Whiskey Money" was £2,700 - more than half of the total income of the College.[4] It's early prospectí emphasise the need for practical training and the integration of training and education which is a fundamental of the present Industrial Training Act.[5]

"In the conviction that Technical Education is efficient in proportion to the closeness of co-ordination of the underlying scientific studies with the practical training of the workshops, by the arrangement adopted the division of the year into two periods of equal length, during the six winter months of which the apprentice attends the college and during the remaining six months in the workshop, an opportunity is given to the apprentice to carry on simultaneously each year both theoretical and practical training and thus to avoid a too common defect in technical education, namely the divorce of several years between theory and practice which experience has shown to be detrimental in many essential respects, both to the complete education of the student and his future interests in life." An afternoon release course for clerical employees was begun in 1902.

In 1902 the first sandwich course in Britain was instituted at the Sunderland Technical College. It is an example of the cooperation between local colleges and employers which is fundamental to good training and associated education and as such it is worthy of examination in detail to emphasise the importance of local initiative.[6]

The student apprentice scheme was begun in 1903 and was fifty years in advance of the general development of sandwich courses in this country. Dr. Robert Gordon Bell its innovator moved to

Sunderland after retiring from Glasgow University. He immediately began a campaign for technical education, following a study tour of technical colleges in Europe during which he was particularly impressed by the sandwich courses at the Technical Hochschule in Charlottenburg. He was able to communicate his enthusiasm to other worthies, notably Mr. Meek of Scotia Engine Works who immediately offered to release twelve apprentices and engaged eight journeymen in their places. Twenty seven other firms including fourteen in shipbuilding and seven in engineering also pledged support. The prospectus of 1912 - 13 gives a full description of the course.

"PATTERN FOR STUDENT APPRENTICE COURSES"

Age 16	:	Matriculate and become apprenticed.
Age 16 to 18	:	Full time for two years in the shops of the firm to which the student is apprenticed. During these two years he must attend evening classes in Practical Mathematics, Applied Mechanics and Machine Drawing.
Age 18	:	Enter the day course on October 1st. Thereafter attend each year as follows: The College from October 1st to March 31st. The Workshops from April 1st to September 30th.

At the close of the course he obtains the Diploma of Associateship of the Technical College. Honours or Ordinary Grade, and also, if he desires his University Degree in Engineering from London.

The students were not paid during their six months at College but the time counted as part of their apprenticeship and

their annual wage increment was safeguarded. Some of the present teaching staff of the Technical College were educated underthis scheme and they emphasise the sense of privilege felt by the chosen students, despite the financial hardships involved. Twenty five scholarships to pay college fees were offered and six students a year were employed during the evenings as laboratory assistants. About sixty pounds a year was available from bequests. The living expenses had to be met by evening or weekend employment. In 1913 a student who had obtained a B.Sc. under the scheme donated £6.10.0. from his first year's salary, to be given to the most needy student on the course.

Despite the financial problems the course prospered. In 1906 - 7, 45 students attended for 30,481 hours. In 1907 - 8 the first group of students completed the course. Four of them obtained B.Sc. including two with honours. Only the best performers on the preliminary courses were offered places and wastage over the course was negligible. The total number on the course was maintained at about 50 and continued to 1931 - 2 from which date there was a gradual decline in numbers as full time courses and paid release from employment became more common. A smaller number of students continued to take part and it was finally closed in the session 1946 - 7.

The importance of this scheme was that it was the first sandwich scheme in Britain, it maintained a close and practical

liaison between employers and the college, it integrated training and education, and for over forty years maintained a very high standard of degree and diploma passes. These virtues are rare even in the present system of technical education.

The Student Apprentice scheme was unique. The bulk of the work of the College was in evening classes. In the first session at the College there were over 40 evening classes, 15 of which were for Science and Art Department examinations at Advanced and Honours levels. In 1909 - 10 there were 520 students attending evening classes and 58 student apprentices on day courses. A full course included three years on an elementary technical course followed by four years to a London external degree. Three evenings a week of lectures for seven years were demanded with private study and a full week's employment. The 1918 Education Act offered a solution to this grinding regime.

By this Act Local Education Authorities were empowered to provide day continuation schools for all children aged between fourteen and eighteen. Vocational and general education courses were to be provided on a day release basis. By 1921 only six authorities had complied, with a total of 95,000 on release;[7] this fell to 42,000 in 1938 as a result of building restrictions and lack of enthusiasm for training during a long period of high unemployment. In Sunderland the provisions of the 1918 Act

were not carried out. A detailed scheme was prepared but it was shelved in 1921 because of financial difficulties. The prospectus for 1939 boldly claims "There is a place for every young person entering one of our technical industries after leaving school to continue his or her technical education." Unfortunately over a thousand of these places were occupied during the evenings and only 32 on day release.

The failure of the Day Release provisions of 1918 were analysed in "Youth's Opportunity," a Ministry of Education pamphlet published in 1945. The reasons given are useful warnings in considering the future of the 1964 Act. Four reasons for failure were listed.[8]

(1) No day was appointed for the scheme to begin. School leavers found that "while they themselves were obliged to attend a day continuation school, their friends who lived in the next street were free to work a full week."

(2) Few experienced teachers were available.

(3) Old buildings were adapted "there was no feeling of going forward."

(4) Public opinion was not really convinced that the scheme ought to be carried through.

The pamphlet concludes from this that "If compulsory part time education is to be a success in the future it will be necessary to avoid the mistakes and misconceptions which led to the collapse of the system twenty three years ago." It may also be taken as a warning against legislation which is too permissive. A warning echoed twenty years later by Lady Williams.[9]

In order to avoid the problems which ensued from 1918, the Education Act of 1944 was precise and compulsory in its provisions for further education under the "County College" scheme.

The 1944 Act in Sections 43 - 46 "County Colleges," sets out in detail the procedure by which the Minister was to demand a survey and a plan from each Local Education Authority. A college attendance notice was to be served on each young person under the age of 18 who was not already receiving full time or part time instruction. Fines were laid down with up to one month's imprisonment for absence. Though the 1944 Act was more practical in its approach. It was no more successful in its results.

Three years were allowed for the local authorities to produce detailed schemes for Further Education in their areas. The scheme for Sunderland was not submitted until 1951.

This report estimated that in 1947 there were 9,242 young

persons who were over fifteen and under eighteen. Of these 940 were in full time education. Allowing for those not employed probably 8,000 were working. In 1947 - 8 only 141 boys and 0 girls within this age range were "released". This gives a percentage for boys only of 3.6 and a combined percentage of 1.8. The national figure for both boys and girls in 1948 was 10.6%[10]. Sunderland had certainly lost its distinguished position of the beginning of the century. The Local Authority's plan to compensate for this lack of progress was expensive.

The 1944 Act demanded one day of general education for all. Vocational education would be given on a second day or in the evenings. The plan for Sunderland proposed four new county colleges and major extensions to the existing Technical College and College of Art. The estimated capital expenditure was:

Actual	1948 - 9	£ 14,500
Actual	1949 - 50	£ 16,000
Proposed	1950 - 51	£ 79,000
Proposed	1951 - 52	£ 404,000
Proposed	1952 - 53	£ 521,000

In fact a thirty fold increase in spending over four years. None was spent. The 1944 provisions were shelved with those of 1918.

The decade following the publication of Sunderland's scheme

was one of very slow progress in technical education. 1951 is described by D.M. Silbertson as a "black year". "The Berlin Blockade, the establishment of N.A.T.O. and the outbreak of the Korean war had each in turn led to increased expenditure on defence; another balance of payments crisis hung over the country, precipitating a general election. Following the election, cuts in educational expenditure of great severity were made."[11] It was not until the end of the Korean war in 1954 that there was any easing of these restrictions. The statistics for Sunderland reflect this very slow growth. Between 1952 - 3 and 1957 - 8 day release increased by one third. An actual increase of only 319 students compared with an extra 2,000 who had to attend evening only classes. Many of these were conducted in temporary premises by part-time staff who had other employment during the day.

This unsatisfied demand for education resulted in the publication in 1956 of a White Paper on "Technical Education."[12] The paper promised a national building programme of £9 million in 1955 - 6 followed by a further £70 million by 1960. The opening of West Park College of Further Education in 1959 was one development from this new investment. The opening of the college was followed by an immediate increase in the numbers on release. An extra 528 students on day release were accomodated in 1959 - 60 . more than the total increase over the preceeding eight years of

austerity. The lack of investment in Technical Education during the period 1945 to 1956 created a very serious shortage of qualified men. The Henniker Heaton committee's[13] plans to double day release by 1970 were made necessary by this failure.

The provisions of the 1956 White Paper had a second effect on the provision of further education in Sunderland. Under the heading "Colleges of Advanced Technology" in the report, Sunderland Technical College was named as one of 24 colleges receiving a 75% direct grant. This section states that "The Government now wish to see the proportion of advanced work at those colleges vigorously increased so that as many of them as possible may develop speedily into Colleges of Advanced Technology." In 1959 all work below S3 standard was transferred to temporary premises in an old Board school until new buildings were erected for a further education college. In 1962 the departments of Commerce, Food and Clothing and General Studies were transferred to an old grammar school building. In order to achieve College of Advanced Technology status the original college was now offering only advanced courses. An important result of this was that two colleges had been established concerned only with lower level courses. Their principals and staff were thus primarily concerned with apprenticeship and other preliminary courses. The marked development of these courses described below may in part be the result of this horizontal specialisation.

The overall changes between 1945 and 1960 have been described above, but there were also changes related to the employment structure in Sunderland.

From 1946 to 1954 student numbers in each college department are available. Throughout the period mining students formed the bulk of students on release. In 1946, 65% of students on release were young miners, compared with 19% in building and 13% in engineering. It is surprising that no shipbuilding apprentices were granted day release until 1947 - 8. This is partly due to the decline in shipbuilding on the Wear which resulted in a very small number of apprentices being taken on. The 1952 tonnage launched on the Wear was less than 60% of the 1913 total. Similarly the number of mining students declines from a peak of 365 in 1946 - 47 after nationalization, to 335 in 1952 - 53. The students in mining and shipbuilding were replaced by those in Engineering. The 1945 - 6 total of engineers on day release is 41, in successive years it is 76, 80, 70, 82, 95, 131 and in 1952 - 53, 200. At the 1951 census there were 6,000 workers in engineering in Sunderland and the industry continues to expand rapidly. In 1964 it overtook shipbuilding as Sunderland's major employer.

Before examining in more detail the development of technical education and industrial training in the period immediately before the Industrial Training Act the change in attitude between 1944

and 1960 must be pointed out. The County College provisions of the 1944 Act promised day release for all young workers to general education courses. Vocational training would be given on a second day of release. Release from industry had developed rapidly but was far short of being general for all. A comparison of local and national statistics between 1951 and 1961 illustrates this:

STUDENT NUMBERS	GREAT BRITAIN			SUNDERLAND		
	1951	1961	INCREASE %	1951	1961	INCREASE %
Day Release	298,000	549,000	84%	687	2586	277%
Sandwich	0	8,000	-	0	190	-
Evening Only	550,000	773,000	49%	2474	4054	63%

(Statistics extracted from Appendix Tables VIIIa and Ia.)

During the decade national numbers on day release almost doubled and there was the important introduction of sandwich courses. In Sunderland numbers on day release more than trebled because of the development of the Engineering department as described above. These were remarkable achievements under a voluntary system and results achieved after the Industrial Training Act must be viewed with this in mind. Though there was a marked change in the attitude of employers towards day

release, less than 30% of boys and 7% of girls under 18 were enjoying this privilege by 1961 in the country as a whole.

The problems involved were being recognised. In 1959 the Crowther Committee[16] headed its first chapter on technical education, "Neglected Educational Territory." Its statistics, collected for the first time, showed that only 26% of those undertaking Ordinary National Certificate Courses completed them in the three years allowed. Wastage was appatent on all courses and some revision and coordination of the system was called for. The committee stressed the need for day and block release. It urged local colleges to mount full time basic courses for 15 year olds.

The need for coordination was met to some extent in 1961 when the White Paper "Better Opportunities in Technical Education" was published. It included a review of the situation, a series of proposals, and, for the first time, an official plan of the system of further education courses which had evolved over the century. The first paragraph summarised the need for changes.[17] "There are three main reasons for reorganising the present system of courses for technicians, craftsmen and operatives in our technical colleges. First, it has not kept pace with the changes that are taking place in industry, and in particular the need for more and better trained technicians. Secondly, it does not

take adequate account of recent developments in the secondary schools, and it too often allows for a gap of one year between school and technical college. Thirdly, a disturbingly high proportion of the students do not complete their courses or fail to pass the examination at the end of them." The White Paper concluded with a chart[18] showing the proposed new pattern of courses at operative, craft, and technician levels. This simplified what had been an ad hoc confusion of courses. Employers, colleges and trainees had some guidance to the range of courses available. No attempt was made to reorganise the details of the system within the framework. Examining bodies were still able to insist on entry qualifications, syllabi and examinations peculiar to themselves. In Business Studies the fragmentation of courses caused by the slightly differing requirements of each Professional Institute continued.[19] The importance of the White Paper was that the place of each course within the general framework was shown on a chart. Trainees could see what preliminary courses were necessary and what more advanced courses ensued. The next problem was to ensure that all trainees had the opportunity to attend these courses on a block or day release basis. The Appendix to the White Paper showed that 152,000 students were attending vocational evening classes.

In Sunderland the statistics below show that some employers were willing to take advantage of the improved system:

WEST PARK COLLEGE 1960-61 TO 1967-68 STUDENT NUMBERS

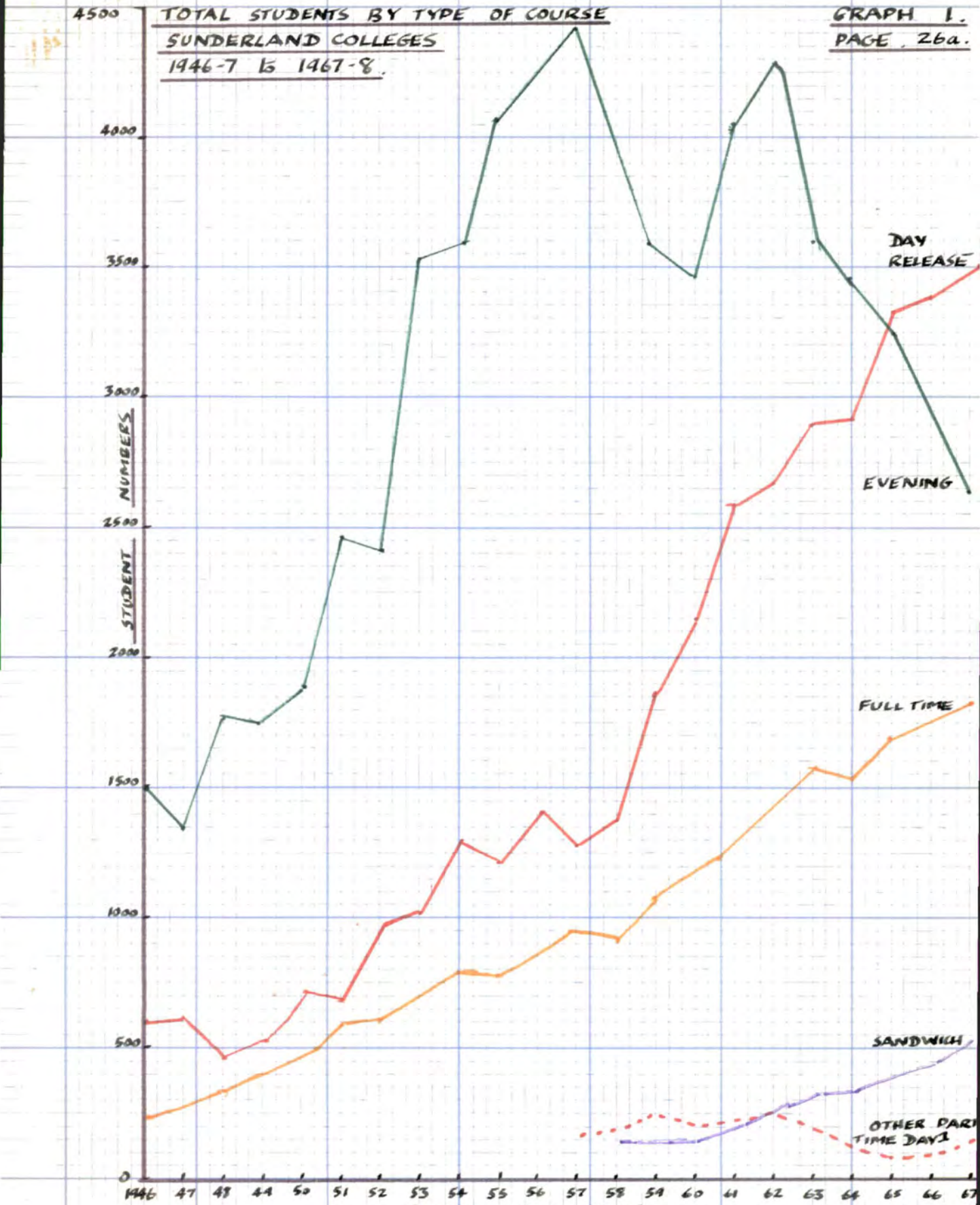
(Course statistics for all Colleges are illustrated in GRAPH ONE)

YEAR	FULL TIME	DAY RELEASE	EVENING ONLY
1960-61	(131)*	1035	724
1961-62	(135)	1165	962
1962-63	(138)	1698	943
1963-64	128	1728	492
1964-65	150	1742	477
1965-66	283	1967	318
1966-67	327	2363	344
1967-68	220	2371	240

*N.B. The full time students shown in brackets were on courses transferred to Monkwearmouth in 1963-64.

This table shows two clear trends. The numbers on day release grow steadily with a burst in 1962 - 63 when the new West Park block was opened and a second burst from 1964 when the three Industrial Training Boards which effect the college were established. There is however a negligible increase in the last year shown. The second feature is the decrease in evening class students to only 240 in 1967 - 8. Of these only twenty nine were under 21 years of age. Evening courses have been deliberately run down in order to encourage release during the day. The few evening classes remaining

TOTAL STUDENTS BY TYPE OF COURSE
SUNDERLAND COLLEGES
1946-7 to 1967-8.



([1] OTHER PART TIME DAY - ie not on release - to 1957/8 these were included with "Day Release")

are the later years of long courses and these are being discontinued as the present students complete them.

The survey of training in various sectors of industry given in subsequent chapters will show that the developments outlined above were concentrated in those industries for which apprenticeships were common. In Sunderland this contrast is brought out by the physical separation between the West Park College providing courses in Shipbuilding Engineering and Building and the Monkwearmouth College providing all other courses.

MONKWEARMOUTH COLLEGE 1962-3 TO 1967-8 - STUDENT NUMBERS

YEAR	FULL TIME	DAY RELEASE	EVENING ONLY
1962-3	405	286	1916
1963-4	590	492	2105
1964-5	548	687	2322
1965-6	576	945	2184
1966-7	639	743	2105
1967-8	695	809	1916

The Monkwearmouth College of Further Education opened in September 1962. A building became available when the

the Monkwearmouth Grammar School was transferred to a new site, and the opportunity was taken to devolve the remaining lower level courses from the main Technical College. The departments of Housecraft, Commerce and General Studies were transferred and a new block was built to provide specialist accommodation. The contrast between the West Park and Monkwearmouth statistics helps to explain the need for the Industrial Training Act. When the statistics for 1963/4 are extracted from the above tables and shown together, this difference in structure is clear.

	FULL TIME	DAY RELEASE	EVENING ONLY	TOTAL
Monkwearmouth	590	492	2105	3187
West Park	128	1728	492	2343

The low numbers on day release and the consequent very high numbers on evening only courses at Monkwearmouth compared with West Park illustrate two clear features of technical education. Day release is still closely allied to apprenticeship and therefore strongest in Engineering and Shipbuilding. Secondly, girls are expected to train full time at their own expense or to take evening class courses. The development of the more recently established training boards and the publication of the Central Training Council's recommendations on Commercial and Clerical Training should help to changethis.[20]

The variations between industries in Sunderland were apparent in the country as a whole. In 1964 a committee under the Chairmanship of C. Henniker Heaton published its report entitled "Day Release". This review of the national situation provided a useful summary of the situation in 1964 when the Industrial Training Act was being published. The introduction to the report[21] records that, "Despite the development of day release in some directions, there was a serious numerical short fall in industry and commerce as a whole." The committee emphasised that the recommendations made were conditioned by shortage of public funds and they reluctantly accepted that release for all young people, "could not be granted without holding back the prospects for other urgent educational developments." The committee was unanimous that all young people up to the age of 18 should be granted at least the right to Day Release and that a further review should be made in 1970. The Industrial Training Act introduced a new source of revenue in the form of levies on firms and to some extent therefore contributes towards the overall costs of release.[22] The direct encouragement to employers must also be effective. The Henniker Heaton Committee proposed essential minimum targets to be achieved even without this help from the Boards. In 1962/3 the total number of young people on release was 261,000. The committee recommended an average increase of 50,000 a year with a resultant doubling of the total by 1969. They suggested that priority should be given to those already attending

evening classes, to those requiring further education as a part of vocational training, to the employees of public authorities, and to girls. In short they indicated the inequalities of a system in which an engineering apprentice might be granted release whereas a parallel trainee in another firm might have to attend evening classes, and a girl clerical trainee even in the first firm would be expected either to attend a full time preliminary course at her own expense or to attend evening classes. The committee recommended that <u>all</u> young people should have a right to release. The Industrial Training Act was passed in order to provide more qualified men and women to meet national needs. The results of both approaches would be similar but it is important to note that whereas the Henniker Heaton committee stressed the needs of the individual trainee, the Industrial Training Act is particularly concerned with the needs of industry as a whole.

The Henniker Heaton report reviewed trends in day release and a comparison between this and the development in Sunderland provides a useful conclusion to this chapter. The committee had to ask for statistics to be provided for their study.[23] These showed that in 1958 149,000 boys and 36,000 girls under the age of 18 received day release, a total of 185,000. The percentages of the age group were 17.7 for boys and 4.4 for girls. By 1962 the percentages were 18.3 for boys and 4.77 for girls. To some extent this slow growth is the result of an increase in full time

students but more than half of the age group were receiving no education at all. In 1962/3, 550,000 boys and 694,000 girls were receiving no day time education. The discrepancies between industries ranged from 100% of boys released in Gas, Electricity and Water Supply to 1.2% of girls in Insurance, Banking and Finance.

Directly comparable statistics for Sunderland are not available in that the total in the age group is not known. College returns show student numbers by age, and the Youth Employment service provide totals of school leavers and of placement in industry. From these records calculations suggest that it is probable that there were some 6,000 employed in the age group in 1962 of whom 1,400 were granted day release. The overall percentage is over 20%, because of the high proportion of apprentices in shipbuilding and engineering in the age group. Only 240 girls were released, half of them from national government offices. The differences between industries reflect the national pattern. Only 2 trainees were released by all of the firms engaged in Insurance, Banking and Finance compared with 52 firms in Timber and Furniture - and industry with a similar number of employees in the area.

In 1964 the situation called for regulation. The system of industrial training and technical education had developed from

crisis to crisis. The right to day release for all was granted and withdrawn at intervals from 1918 onwards. Each expert committee pointed out the shortage of skilled manpower and demanded a national system of training. The Industrial Training Act is expected to remedy the accumulation of problems since the Industrial Revolution. The words of Mr. Lowthian quoted in Chapter One were appropriate "We have to start from scratch in the sense of conscious planning as a coordinated industrial development." The provisions of the Act and the immediate developments from them are described in the next chapter.

NOTES

1. Argles, 1964.
2. Tylecote, 1957.
3. Hall, 1964. (M.Ed. Thesis.)
4. The prospectus of the Technical College was published annually from 1901. A complete set is available at the Sunderland Polytechnic. Details of courses and changes in the College are taken from these prospecti.
5. Foreward to Prospectus of 1902-3.
6. A review of the first ten years of the scheme is included in the Prospectus for 1912/13.
7. "Youth's Opportunity" HMSO, 1945, p. 4.
8. Op. cit. pp. 4 and 5.
9. See Chapter One of this thesis.
10. Silbertson, 1959, p. 23.
11. Op. cit. p. 17.
12. Technical Education, HMSO, 1956.
13. Day Release, HMSO, 1964.
14. Technical Education, paragraph 69.
15. "The British Isles," Stamp and Bearor, Longmans 1954, p. 403.
16. "15 to 18" HMSO, 1959.
17. "Better Opportunities in Technical Education" HMSO 1961 p. 5.
18. This is ; reproduced here as Appendix I, Table C.
19. This fragmentation is criticised in "The Size of Classes and Approval of Further Education Courses," HMSO, 1966, p. 17.
20. See Chapter 7.

NOTES

(continued)

21. "Day Release" p. 6.

22. A College now charges an economic fee for training (not education) to employers. The charge is normally met by a grant to the firm from the appropriate training board.

23. There is a lack of statistical material other than crude numbers on courses. Special questionnaires were circulated to all colleges in order to obtain the statistics required for the committee's report.

CHAPTER THREE

THE INDUSTRIAL TRAINING ACT 1964

"For the purpose of making better provision for the training of persons over compulsory school age for employment in any activities of industry or commerce, the Minister may make an order specifying those activities and establishing a board to exercise in relation to them the functions conferred on industrial training boards by the following provisions of this Act."[1]

These words established a new authority in technical training and education. An industrial training board consists of members from the employers, from the trade unions and from the technical education service. The Ministry of Labour (D.E.P.)[2] and the Department of Educatinn and Science are also represented. A board is established for each industry or for a group of related industries. In 1964 boards for Wool, Jute and Flax, Iron and Steel, Engineering, Construction and Shipbuilding were set up. It is expected that some thirty boards will be required to serve the whole of manufacturing industry and commerce. Of these twenty-six had been created by December 1968.

The Minister of Labour was granted the power to establish boards after consultation with the parties concerned. Each member of a board was to be appointed by the Minister of Labour. The

board then had powers to appoint its own staff. The general administration of the Act was conducted by the Ministry of Labour. There are grants available especially at the outset of a new board. A Central Training Council was established to advise the Minister and the boards.

The individual board has considerable powers. These are laid down in paragraph two of the Act itself and are summarised below.

SECTION1. (a) "An Industrial Training Board shall provide or secure the provision of such courses and other facilities as may be required, having regard to any courses or facilities otherwise available.

(b) It "may approve such courses and facilities."

(c) It shall "publish recommendations with regard to the nature and length of training of any such employment and the further education to be associated with the training [illegible], the standards to be attained as a result of the training, and the methods of ascertaining whether these standards have been attained."

(d) It may apply selection tests and attainment tests and award certificates for standards of achievement.

(e) & (f) It may assist persons in being trained for employment.

(g) It may assist in research in "matters relating to training."

SECTION 2 "An Industrial Training Board may enter into contracts of service or apprenticeship with persons who intend to be employed in the industry."

SECTION 3 & 4 A board may provide courses for other Boards. It may pay maintenance and travelling allowances for persons attending courses, make grants or loans to persons providing courses or facilities, and pay fees to persons providing further education in association with their training.

Further sections detail the other functions and responsibilities of the boards and are summarised very briefly in the following paragraphs.

A board may appoint committees, or join with another board to appoint committees. The joint committee for the Foundry Industry was an example of this. An important section is the levy orders. "For the purpose of raising money towards meeting its expenses an industrial training board shall from time to time impose ..... a levy on employers in the industry....." This power is exercisable by statutory instrument. Loans up to a total of £50 million or more with the approval of both Houses can be made to

Boards by the Minister of Labour, (D.E.P.) The Board can also borrow from other sources. The Board can demand returns from employers and examine records of training. These are, however, not to be disclosed without the consent of the employer. Fines are imposed for failure to comply with a demand for information and for making false entries. An industrial training board may be declared in default for not submitting its proposals to the Minister within a reasonable time. The audited accounts and an annual progress report must be laid before Parliament.

The Act also establishes under the Minister of Labour (D.E.P.) a council, "to be known as the Central Training Council which shall have the duty of advising him on the exercise of his functions under this Act and on any other matter relating to Industrial or commercial training which he may refer to it." The Central Training Council includes employer and employee representatives with representatives from educational bodies, the Minister of Labour (D.E.P.) and the Department of Education and Science. Its reports must also be laid before Parliament.

Two other functions remain. A firm may appeal against being liable to levy from a particular board and against the total amount of levy claimed. There is no right of appeal against the rate of levy established by the board. A firm must therefore prove either that its work is not within the scope of that board, or that the sum on which the percentage levy has been assessed is incorrect.

The final point of importance is a statement on the function of the Local Authority. "The facilities for further education that may be provided by a local education authority under section 41 of the Education Act 1944.....shall be deemed to include and always to have included facilities for vocational and industrial training."

The Act, as outlined above, gives considerable power to the individual Boards. The Boards are responsible individually to Parliament and are thus totally independent of each other. Training policies may therefore differ considerably. The Central Training Council acts as an advisory body to the boards, and the Ministry, and therefore has some influence in creating a common policy, particularly in sections such as management training, training of training officers and commercial and clerical training which are applicable to all boards.

The diversity of the boards can be illustrated by listing,[3] them in the order in which they were established.

	DATE	TITLE	TOTAL EMPLOYEES	LEVY 1967-8
1	June 64	Wool, Jute and Flax	180,000	1.5% (of payroll)
2	July 64	Iron and Steel	304,000	£18/employee
3	July 64	Engineering	3,549,000	2.5%
4	July 64	Construction	1,700,000	1.0%
5	Nov 64	Shipbuilding	130,000	1.55%
6	June 65	Electricity Supply	250,000	0.025%
7	June 65	Water Supply	45,000	1.1%
8	June 65	Gas	125,000	1.25%
9	July 65	Ceramics Glass and Minerals	345,000	1.5% or 0.75%
0	Dec 65	Furniture and Timber	215,000	0.9%
1	Feb 66	Man Made Fibres	47,000	0.2%
2	March 66	Carpets	42,000	0.9%
3	March 66	Knitting, Lace and Net	142,000	1.0%
4	July 66	Cotton and Allied Textiles	220,000	0.9%
5	Aug 66	Agriculture, Horticulture & Forestry	500,000	£3/full time employee
6	Sept 66	Road Transport	1,000,000	1.6%
7	Nov 66	Hotel and Catering	1,000,000	1.0%
8	March 67	Civil Air Transport	61,000	£8/per employee
9	Aug 67	Petroleum	84,000	-
0	Aug 67	Rubber and Plastics Processing	220,000	-
1	Sept 67	Chemicals & Allied Trades	500,000	-
2	May 68	Paper & Paper Products	250,000	-
3	May 68	Printing and Publishing	400,000	-
4	July 68	Distribution	2,250,000	-
5	July 68	Food Drink and Tobacco	135,000	-
6	Nov 68	Footwear, Leather and skin.	180,000	-
		TOTAL	15,139,000	

A very large proportion of manufacturing industry, with the notable exception of clothing, is now served by a board. The Act however "covers all activities in industry and commerce. This includes for example agriculture distributions finance, banking and insurance, in addition to manufacturing industries."[4] Commerce is at present almost untouched by the Act. The training board for Distribution held its first meeting in September 1968. There are 130 trade associations to be consulted. There are two and a half million employees in the industry, many of them in very small establishments.[5] In 1966-67 only 58% of boys and 1.8% of girls were released for further education.[6] The Board can hardly be expected to publish comprehensive training advice before 1970. No other branch of commerce was served by a board by December 1968. A study of commercial and clerical training is made in chapter seven and the problems created by the delay in establishing certain boards are examined in the final chapter.

The powers of an industrial training board have been summarised above. The Ministry of Labour published a guide to the Industrial Training Act and followed this by memoranda from the Central Training Council on particular sectors of training. The "Industrial Training Act: general guide; scope and objectives," sets out the Ministry of Labour's interpretation of the Act. The foreword to the guide states simply that;

"The Industrial Training Act 1964 has three main objectives:

To ensure an adequate supply of properly trained men and women at all levels of industry; to secure an improvement in the quality and efficiency of industrial training; to share the cost of training more evenly between firms."

The pamphlet later states that the boards must "publish recommendations on such matters as the nature, content and length of training for occupations in their industry and also the further education which should be associated with the training. "The powers of the board extend to all forms of training (including retraining) and to all occupations in the industry."[7]

The pamphlet lists[8] the tasks of a Board in order:-

(1) To identify the establishments which fall within its scope.

(2) To obtain information about the existing quality and quantity of training.

(3) To make recommendations on the nature of training and, "to consider the volume of training which will be required in the various occupations in the industry....in the light of future economic and technical changes."

The boards have the right to article their own apprentices. It would seem possible therefore that a board could train apprentices in special "growth occupations" in order to anticipate a future demand. This would be a valuable contribution to the national

economy, particularly in the North East where there is a large group of unemployed.[9]

The pamphlet later emphasises that there will be no obligation on an employer to train. "The only obligation on an employer will be to comply with requests for information and to pay a levy".[10] An employer may therefore choose to contribute to training within his industry by paying a levy to the general pool. He may then recruit skilled labour trained by other firms at his expense. If he does provide training it must comply with standards laid down by the appropriate board in order to earn a grant. An employer is thus not prevented from providing inferior training. The Association of Teachers in Technical Institutions pointed out that if levy and grants were low many employers would not improve their performance. They called for a levy "so high that it cannot be ignored."[11] The problems involved in this are examined in more detail in the final chapter of this thesis.

The Ministry of Labour (D.E.P.) through the Central Training Council maintain an advisory service which ensures some comparability of standards between boards. Their "Memorandum No. 5," outlines the main tasks facing Industrial Training Boards. It is a manual of advice to the boards on how to organise their training with paragraphs such as "assessment of manpower

and training requirements," "training and management" and "off the job instruction". Other memoranda have been concerned with further education,[12] (1 and 4) safety training, (2) programmed instruction, (3) training of instructors (6), and training in occupations common to various industries (7).

The two pamphlets on further education emphasise the Ministry of Labour (D.E.P.) policy that no grant scheme will be approved unless there is a further education content. The Act "recognises the division of responsibility but does not create it." "The Act may tend to sharpen the distinction between education and training."[13] These two statements indicate the Ministry of Labour's concern that there must be full discussion at all levels between board representatives and further education colleges. Educational representatives have seats on each board, but the pamphlets emphasise that the local representatives of the boards must act as local intermediaries giving advice to both employers and colleges. "A constant flow of relevant information between the boards, the Education Departments, local education authorities, examining bodies and colleges will be an essential condition to the planning of a satisfactory programme of education and training."[14]

The provisions of the Industrial Training Act and the training framework established as a result have been outlined above. In this chapter the scope and powers of the Minister of Labour (D.E.P.) and the Central Training Council on the one

hand and of the individual boards on the other have been stated. Before reviewing overall progress and attempting a critical analysis of the results as a whole, the progress in particular sectors is examined in detail at local, regional and national levels. The work of three well established Boards is considered in turn. Training in Commerce throughout industry is then reviewed. In the final chapters some attempt is made to assess the effectiveness of the Industrial Training Act in achieving the aims for which it was passed.

NOTES

1. Schedule of the Act. page 1.
2. For an explanation of the use of titles see Preface.
3. Data from: "Industrial Training Boards: Progress Report No. 3." B.A.C.I.E. This is revised to July, 1968. Names of Boards established since July 1968 have been added.
4. "Industrial Training Act: General Guide; scope and Objectives" Ministry of Labour, April 1964. p.7.
5. Progress report in "Technical Journal" Dec. 1968 p. 18.
6. See Appendix V111 b
7. "Industrial Training Act; General Guide." Ministry of Labour April 1964. Page 8.
8. Op. cit. page 9.
9. In December 1968 there were 5,400 unemployed on Wearside and a total of over 60,000 in the Northern Region. (D.E.P. Statistics.)
10. Op. cit. page 9.
11. In evidence to the Select Committee on Estimates (See Chapter 9.)
12. A full list of publications is given in Appendix X11 of the Central Training Council's Third Annual Report HMSO March 1969.
13. "Memorandum No. 1." page 2.
14. "Memorandum No. 1." page 2.

CHAPTER FOUR

THE WORK OF THE SHIPBUILDING INDUSTRY TRAINING BOARD

The Shipbuilding Industry in the United Kingdom in 1966 employed only 214,000 workers.[1] Of the 24 groups in the Standard Industrial Classification only "leather, leather goods and fur" employed less.[2] The decrease in the numbers employed had limited the demand for new employees, especially at apprentice level. In Sunderland no new apprentices were engaged from 1961 to 1964. Since new entrants form the bulk of trainees, the demand for training places has not been so great as in the growth industries.

There are two distinct groups withing the industry. The Shipbuilders are concentrated in a few large centres. All are major firms, many of which are amalgamating as a result of the Geddes proposals. In contrast there are numerous very small boat-building firms scattered around the coast and on inland waterways. Both groups are involved in the Shipbuilding Industry Training Board.

In the North East the decrease in employment in Shipbuilding has been a social problem. Sunderland typifies the industry in the region, but its problems are more acute because of its

concentration. In the Northern Region, Shipbuilding employs 43,000 workers and ranks tenth of the industrial groups. Only a very small proportion of these employees are boatbuilders, mainly on the Northumberland and North Yorkshire Coast. There are four great shipbuilding concentrations, Tyne, Wear, Tees, and Furness. Sunderland typifies these four districts. Several shipyards have closed but the remaining yards, grouped into consortia, are now retaining their employees. In Sunderland the number of employees actually increased between 1964 and 1966 and shipbuilding still employs more men than any other of the town's industries. There are no boat builders in Sunderland though nationally about 5% of the labour force is within this group, which is, as a result of the development of liesure sailing, a growth sector in the industry. As a sample study therefore Sunderland illustrates the work of the Shipbuilding ITB in a typical large scale shipbuilding area, but does not illustrate th work of the boat building sector.

The Shipbuilding ITB was established in November 1964[3]. Rather surprisingly its headquarters is not located in any of the shipbuilding areas, but at South Harrow, Middlesex. The Board is responsible for all groups within an industry whose products range from plastic dinghies to the Queen Elizabeth II. No firms are excluded from the levy, and within the first six months 1,100 establishments have been registered. The Board has sixteen members,

six of whom represent the employers six the trade unions, and four the education service. In November 1965 there were six senior staff; chief executive, secretary, assistant secretary, financial controller, chief training officer and assistant training officer. The administrative burden of locating and levying the firms within the industry, particularly the small boatbuilders and repairers, is reflected in the fact that only two of the six are directly concerned with training.

Training policy is suggested by specialist sub-committees. These are for Boatbuilding, Commercial and Clerical Training, Supervision, Woodcutting, Draughtsmanship, Outfitting, Metal-using crafts, Bargebuilding and Common Crafts. The work of these committees is a vital part of the new pattern of Industrial Training. Firms must comply with the standards laid down in order to earn a grant. The technical colleges must therefore offer facilities and courses for training which meet these requirements. The further education part of the Technical Colleges work is not subject to approval by the Board but changes in the pattern of training will bring modifica tions in this sector also. The work of these committees is difficult, in that there is very little established training procedure, and schedules must often be begun from scratch. Despite this it is unfortunate that only the boatbuilding committee was able to make recommendations before September 1967.

The Board has established Regional Offices, beginning in Glasgow in September 1966. The Regional Offices do not decide policy but they are an important link between the Board and the firms. Loca l officers visit firms to advise on methods and equipment and they are available to explain the Boards policies to employers. In Sunderland, and in the North East as a whole, the Newcastle office can cope with this reasonably, in that only a few large firms are involved. On the South Coast however the small boatbuilders may only receive an occasional visit. To some extent this has been remedied by the establishment by the Board of its own training centre at Southampton. Trainees are sent to this centre at Southampton, also a demonstration school for employers and training officers.

The aims of the Shipbuilding Industry Training Board were stated concisely in the first Newsletter to Employers[4] and are quoted in full.

"Implicit in the Boards policy is the recognition of the paramount importance in the industry of:-

1. Examining critically, having regard to the needs of the industry, the skills and knowledge which are required for efficient job performance and of devising training periods, methods and standards, which will enable trainees of all grades to master the required standards of skill and knowledge in the shortest possible time.

2. selecting and training those whose responsibility it will be to fill the role of Training Officer, Apprentice Supervisor or Instructor in the Industry;
3. providing basic workshop experience in a special training centre or area away from the main process of production;
4 granting day or block release facilities to enable trainees of all grades to make the fullest possible use of the further educational facilities that are available.

The future of the industry clearly depends on the skill and efficiency at all levels of the people in it. It is the Board's objective that the best possible training should be provided for these people, and that, in particular, young people entering the industry at no matter what level, should be appropriately equipped for their jobs and their future careers."

With reference to the four aims stated above and to the aims of the Act itself, the results achieved by the Shipbuilding Industrial Training Board are examined below. Though the three basic objectives, quantity, quality, and sharing of costs, are closely related, they are considered in turn in this and the following chapters in order to facilitate comparisons. The case-study data from Sunderland is used throughout to illustrate the more general information available at national level.

QUANTITY OF TRAINING

Since day release is a necessary part of long term training

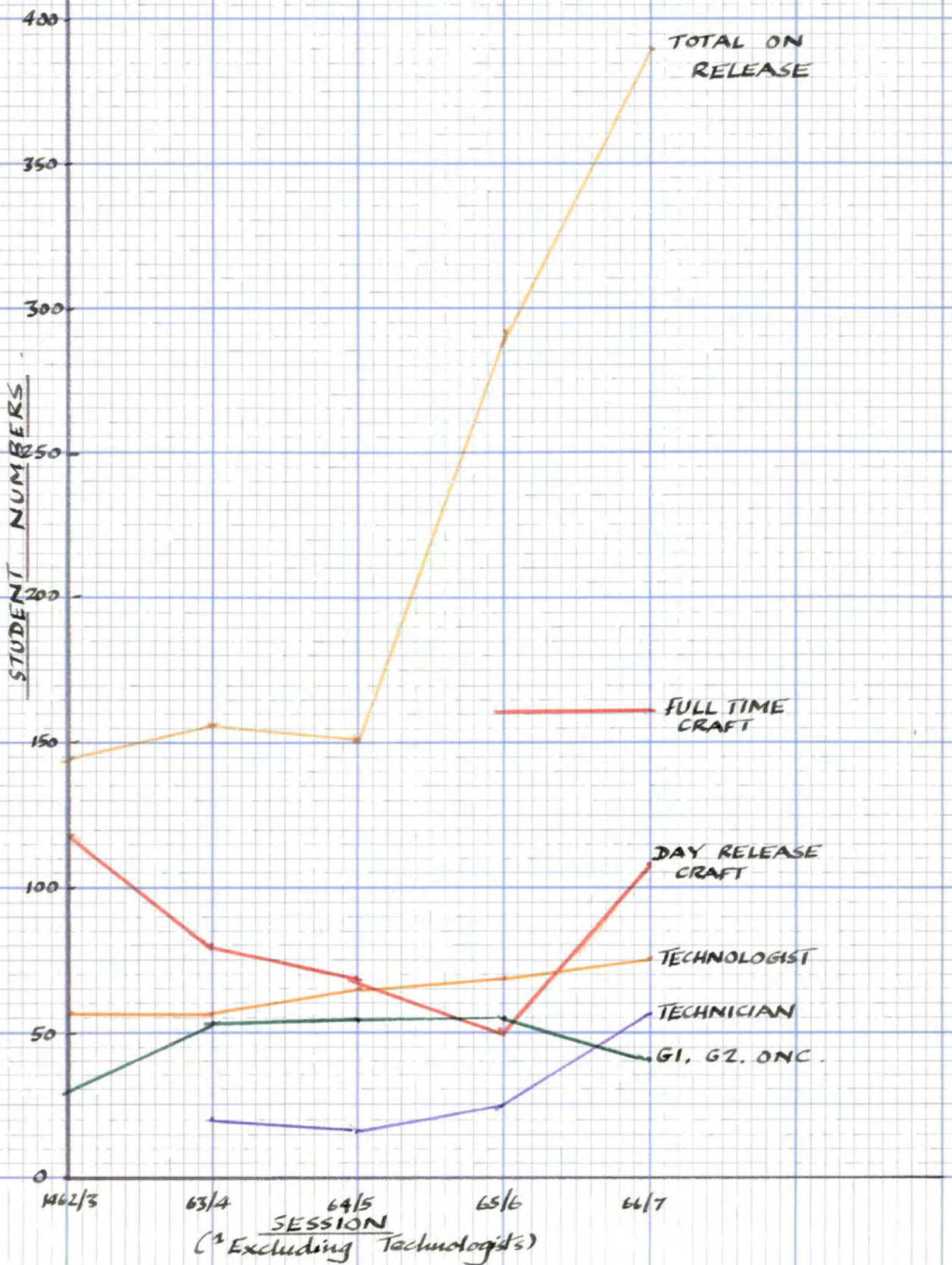
for grant purposes, the numbers attending technical college courses are a reasonable guide to the numbers of trainees in the industry. Nationally these totals are published as "Statistics of Education." These are compiled from annual returns by each College made in November. The statistics for Sunderland examined below are taken from these returns. The local experience is then related to the national framework.

STUDENT NUMBERS ON SHIPBUILDING COURSES AT SUNDERLAND COLLEGES

(Extract from Appendix III Table (a). This is shown in graph form in Graph 2.)

COURSES	1962-3	1963-4	1964-5	1965-6	1966-7
CRAFT LEVEL					
Day	117	81	70	53	120
Full Time Basic	-	-	-	161	161
TECHNICIAN LEVEL					
Day	-	21	17	26	42
Block	-	-	-	-	19
O.N.C.					
Day	38	53	54	55	42
TOTAL	145	155	141	295	394

STUDENT NUMBERS ON SHIPBUILDING COURSES AT THE SUNDERLAND COLLEGES 1962/3 & 1966/7.



TECHNOLOGIST LEVEL*					
Diploma (Sandwich)	51	52	66	70	77
Honours Diploma (Sandwich)	5	4	0	12	11

* As explained below these are international courses. Of the 88 students in 1966-7 only 8 were from Sunderland Firms

The total numbers on release remain steady, despite the run-down in manpower in the industry, until the 1964-5 session. This was the first session after the establishment of the Shipbuilding I.T.B. The immediate change is the introduction of first year full time basic courses. Numbers on Technician courses, introduced in 1963 following the 1961 White Paper,[3] fall slightly in 1964-5 but increase to 26 in 1965-6 and increase sharply in 1966-7 to 42 on day release with a further 19 on the new Block Release course.

The numbers on O.N.C. courses show an apparent decrease between 1963-4 and 1966-7. This is partly explained by the introduction of the new first year full time courses, and by the reorganisation in 1963-4. The new pattern of courses cuts the O.N.C. to two years; the former first year is now a general course, from which students who are not considered suitable for O.N.C. are guided into the technicians course. Though there are smaller numbers initially, the

decrease in wastage should compensate for this. The higher level courses at the Sunderland Technical Colleges draw students from all parts of Britain and there is a significant proportion of overseas students, particularly from Norway and Greece. Though there is an increase in numbers over the five year period this is not as much as one would expect considering the generous grants offered for sandwich courses. The College still offers an H.N.C. course involving three nightsa week for two years. Though numbers have fallen slightly there were still 14 students on this course in 1966-7.

The greatest impact of the Shipbuilding I.T.B. has been at craft level. The number of entrants to craft apprenticeships is controlled by the craft unions. The decreases in numbers in 1963-4 and 1964-5 are in part a result of the lack of orders on the books during that period. The improvement in the position, which was emphasised by a local shortage of young craftsmen because of previous restrictions, coincided with the beginning of encouragement by the Shipbuilding I.T.B. to grant release. A very important development was the introduction of the full time first year apprentice courses. This obviously greatly increases the time available to the college staff and their students. The course is broad based and is designed to give a good knowledge of basic principles so that later changes in technology can be more easily assimilated. Students are also graded and interviewed during

the course so that the appropriate level for further work can be recommended to the employer. The 1967 report of the Shipbuilding I.T.B. [5] shows that between 10th January 1966 and 21st May 1966, 933 of the 12,199 apprentices in the industry changed their jobs. It is hoped that the introduction of the basic course on a national scale will help the apprentice to select his trade and appropriate level of training. For a boy at 16 to sign a five year agreement as an apprentice plater and then to find he does not like the job is disastrous. In Sunderland the course has been particularly well supported. There were nationally 819 students on full time basic courses in February 1967 and of these 161 were in Sunderland. Every new shipbuilding apprentice in Sunderland was granted this facility, whereas nationally there were only 29%.

In Sunderland the Shipbuilding I.T.B. has clearly encouraged the granting of release, particularly at craft level. The introduction of a full time basic course in terms of student-hours available for teaching is an important step. When the results in Sunderland are compared with the national achievement there is some discrepancy. In Sunderland there has been a tradition of release. The firms are now grouped into two large consortia with training and accounting staff capable of carrying out the Board's requirements. The 1966-7 Annual Report of the Shipbuilding I.T.B. estimates that by August 1967 only 1616 places would be

available for basic training whereas 3,381 places would be needed.[5] Thus under 50% would receive adequate basic training compared with the 100% in Sunderland. For other types of training a direct comparison between the Sunderland sample and the rest of the country is not so easy to make. Few statistics are published by the Shipbuilding I.T.B. for other levels of training, though certain aspects are mentioned in the newsletters and reports from the Board. The November 1965 Newsletter states that there were only 18 training officers, 47 apprentice supervisors, and 72 craft instructors in an industry employing 12,000 apprentices. In the 1966-7 sessions only 17 grants were paid for training officers and supervisors.[6] By May 1967 the total of training personnel was 178[7] an increase of only 41 on the November 1965 total. The failure of the sub-committee on supervisory training to publish recommendations may be a factor in this.

Commercial and Clerical training has also been neglected. In the 1966-7 grant year no claim at all was received for this sector. In Sunderland there has been some response to the Board's efforts. The numbers on day release from Shipbuilding firms to Business Studies courses in Sunderland have been[8]

1962-3	1963-4	1964-5	1965-6	1966-7
2	2	0	16	14

This is however a very low proportion of the employees. Only one shorthand-typist was granted release from the whole of the Shipbuilding Industry in Sunderland. Again the relevant sub-committee has failed to publish training schemes despite the advice available from the Central Training Council.[9]

No statistics of the numbers of trainees in the various categories have been published by the Shipbuilding I.T.B. Even if these were available, comparable figures before 1964 do not exist. Some comparison between training needs and training actually done can be suggested by a comparison of levy and grant claims, this is done later in this chapter.

QUALITY OF TRAINING

The quality of training in the industry depends upon the recommendations of the training sub-committees and the success of the Board in persuading employers to take advantage of their suggestions. Any changes from established practices involve provision of both equipment and training staff. A delay must therefore occur between the publication of recommendations and their full implementation by employers and colleges. The training sub-committees were established in 1965-66. It is unfortunate that the industry had to wait so long for their recommendations since any extra building required may well be not available until after 1970.

Even the September, 1967 proposals are not complete. There have been no published results from the committees for laminators, supervisors, managers and commercial and clerical workers. The Central Training Council published its recommendations on supervisory training and on commercial and clerical training early in 1966. We should expect that the relevant committees would have adopted these proposals at least within a year. The January 1967 Newsletter gives the following information on the training of supervisors.

1. March 1966 - pilot survey on supervisory training needs approved by the Board
   - supervisory training committee holds first meeting.
2. December 1966 - report of this survey submitted.

The June 1967 Newsletter tells us that the committee had by then held only three meetings to consider this report. There is a grave need of trained supervisory staff in the industry. Since the selecting and training of Training Officers, Apprentice Supervisors and Instructors is the second stated aim of the Board their failure to publish advice is regrettable.

This delay is not wholly the fault of the Board. The 1967 Report states that, "It has been the Board's policy before finalising its training recommendations to invite comments from the appropriate employers' organisations and trade unions as well as the accredited

representatives of the further education service." This is obviously time consuming, and since all three groups are already represented both in the sub-committees and on the Board, the exercise should have resulted in only very minor modifications which might well have been made after an initial trial period. The Department of Education and Science also created some delay. The recommendations for draughtsmen were submitted in December 1966 and those for first year craftsmen in January 1967. Neither was published until September 1967. The fact that detailed recommendations for six different groups were all issued on the same day in September seems to have been an administrative convenience. It is difficult to believe that all six became ready on the 22nd September. If some of these had been ready even in July, the Colleges might have been able to make some changes for the 1967-8 session. The recommendations for these groups are being considered by the City and Guilds and other examining bodies so that the colleges may have the new syllabi ready for the 1968-9 session.

Though progress has been slow, a clearly laid out programme of training and associated education with tests of competence nationally applied will be of great benefit to the industry. When the programme is available the second task of the Board is to persuade employers to achieve the suggested standards for all trainees. Newsletters, annual reports and full training schedules are sent direct to each employer. The regional Officers of the

Board visit firms to explain any problems and to emphasise points of policy. These officers have the power to inspect the training provided in order to validate the grant claim. The levy and grant procedure is the third method of persuasion and is examined below. In the ideal situation each firm would train enough employees for its own needs. In general terms therefore firms of the same size and structure would have a similar number of trainees. The relationship between the levy and grant for a particular firm is some indication of its response to the recommendations of the Board.

LEVY AND GRANT

Improving the quantity and the quality of trainees are two purposes of the Industrial Training Act. The third is to spread the costs of training more equitably. This third task seems to have taken a large part of the Board's time and certainly occupies the bulk of the space in its newsletters and other publications. The task of locating firms within the classified group, writing, telephoning or even visiting each until a reply was obtained, then obtaining from each the detailed statistics required to assess levy and grant is an extremely involved and time consuming task. This job had to be done immediately and its enormity may have contributed to the delay in publishing training recommendations.

A levy of 0.55% was taken in 1965/66 and only training expenses which had already been incurred were recompensed by grants. These included the full basic wage of apprentices being trained off the job and extended to subsistence and tuition expenses for higher level courses, such as the B.Sc. in Naval Architecture. The levy of 0.55% of the total salary bill was estimated to yield £700,000.

The first annual report[10] includes the income and expenditure account for the first year which is summarised below.

EXPENDITURE		INCOME	
Grants to Employers	£ 82,577	Levy on Employers	£ 604,412
Grants to other Organisations	£ 140	Ministry of Labour	£ 36,471
Administration	£ 67,459	Other Income	£ 5,267
EXCESS OF INCOME OVER EXPENDITURE	£ 495,974		
	£ 646,150		£ 646,150

The levy of 0.55% was fixed to cover the estimated grants which would be claimed. Only £82,577 was claimed leaving £495,974 to be carried forward. The Board had already conducted a pilot survey to assess the amount of grants that would be required so we can only assume that a large number of employers thought that the grants were not worth the statistical effort required. An interim grant of 1/3rd of costs was offered for all claims

received by 31st January, 1966, but even though 95.7% of the levy had been collected, only 65 of the 986 establishments registered had claimed a grant. These grants were offered fifteen months after the Shipbuilding I.T.B. had been formed. All firms in the industry had received a considerable body of advisory material from the Board and almost all paid the levy.

During the next financial year the firms seem to have caught up with the idea that satisfactory training would be rewarded by a grant. Indeed many firms received more in grant than they paid in levy.[11] The table from the 1966-67 report[12] is summarised below;

EXPENDITURE		INCOME	
Grants to Employers	£ 550,424	Levy on Employers	£ 790,862
Grants to other Organisations	£ 17,364	Ministry of Labour	£ 2,212
Administration	£ 79,894	Other Income	£ 21,560
EXCESS OF INCOME OVER EXPENDITURE	£ 166,952		
	£ 814,634		£ 814,634

In this second year 70% of the increased levy (1.25%) was paid out in grants. There was still however an excess of £166,952 which the report states, "is almost entirely due to the very large number of establishments within the scope of the Board which did not take advantage of the interim grants available in

January 1967."

A useful table is included [13] which analyses the levy and grant procedure for 1965/66. Line (h) shows the percentage of firms claiming grant, in relation to those paying levy, by numbers of firms, and by total expenditure.

SHIPBUILDERS AND REPAIRERS		BOATBUILDERS AND REPAIRERS		MARINE ENGINEERS AND OTHERS	
NUMBER %	GRANT %	NUMBER %	GRANT %	NUMBER %	GRANT %
68.2	73.0	32.2	66.2	30.8	51.6

The previous report[14] included a table showing the size of firms in these sectors.

DESCRIPTION OF MAIN ACTIVITY	TOTAL NUMBER OF EMPLOYEES	TOTAL NUMBER OF ESTABLISHMENTS
Shipbuilding and Repairing	114,968	336
Boatbuilding and Repairing	7,805	457
Marine Engineering	9,146	53
Other	4,140	140
TOTAL	136,059	986

These two tables, taken together, shed some light on the problem. The size of the firm is clearly an important factor in the claiming of grants. The shipbuilders, with an average size of 342 employees, show 68.2% of their members claiming grants. The boatbuilders, with an average size of 17 employees, show only 32.2% claiming grants and marine engineers with a similar size of firm, only 30.8%. It is more probable that a firm of over 300 will have at least a full time personnel officer who will supervise training and ensure that records are kept. The accounts department would similarly have staff to handle the levy and grant procedure. In the average boat-building firm the general manager would have to take on the administrative work involved, and some would consider the grant not worthwhile. The initiation of group training schemes should help in this problem.

The efficiency of the levy and grant scheme in redistributing the costs of training is demonstrated in Appendix D of the 1967 report.[15] This table deals only with those making a grant claim and shows the relationship between levy and grant for firms classified by size. The diagonal $g - g^1$ shows that 94 firms (26.1%) received approximately the same in grant as was paid in levy. 150 firms (41.7%) received less than they paid and 116 firms (32.2%) received more. The three firms on $a - a^1$ and $b - b^1$ were doing far less than their share of training One paid between £3,000 and £5,000 in levy and received back only

£51 to £100. Only 14 firms paid more than this one in levy so we must assume that it employs some 2,000 workers. The two other firms involved received back between £1,000 and £2,000 less than they had paid. Though these three show the greatest proportionate discrepancy, one of the two biggest firms in the industry received back at least £15,000 less than it had paid.[16] These sums are large in an industry where international competition makes profit margins small. These firms can hardly afford to be so short sighted. Because of the levy and grant system they must at least undertake their share of training costs.

The most pleasing feature of the table is that those firms which are concerned about the training of their staff are being rewarded. One firm, diagonal L - L^1 received £5,001 to £10,000 in return for its levy of £251 to £500. It is interesting that five very small boat-building firms appear in this group, each receiving £101 to £250 in return for a levy of only £11 to £25.[17] The small number of boat building firms which made claims has already been shown in the preceding table, but the 32.2% of firms whichdid claim received back 66.2% of the total grant. Managerial interest in training is a key factor.

This table shows that there are grave discrepancies between attitudes to training in the industry. Since only the $\frac{1}{3}$rd of firms who made any claim at all is shown, the number who do little

organised training is further emphasised. This analysis of the 1965/66 levy and grant procedure shows that the advice of the Board had little effect. The greatly increased amounts paid out in 1966/67, may indicate that the system was beginning to have the desired results. The firms which undertake training are at last being rewarded but we cannot assume that a levy of 1.55% will force the more reluctant to do their share.[18]

SUMMARY.

The work of the Shipbuilding I.T.B. between 1964 and 1968 has been examined in terms of the three basic aims of the Industrial Training Act. In conclusion the actual achievements to date may be compared with the specific objectives of the Board as stated earlier in this chapter.

The first aim was to devise training programmes. The sub-committees set up by the Board have not yet fully achieved this primary objective. The second aim was to encourage the appointment of qualified training personnel. This has not been wholly successful. The third aim was to establish full time off the job basic training. The provision of places has expanded rapidly. In Sunderland all apprentices have this advantage. The only problem is that a recommended syllabus will not be available until the 1968-69 session. Since many firms and colleges have

provided equipment and training staff without the benefit of this advice some wastage may occur. In Sunderland the syllabus was evolved by a committee of employers, trade unionists, and lecturers. It is now in its third year and is considered successful. There is some apprehension that the Board's scheme may involve expensive changes. The fourth aim of the Board was to increase numbers on block and day release courses. The statistics from Sunderland and the increase in grants nationally confirm that this has been achieved. For craft and technician apprentices there has been a marked improvement. The percentage of boys aged 15-17 on release has increased from 44.8% in 1964/65 to 57.2% in 1966/67.[19] There is still however a deficiency in the training of supervisory staff and particularly in the training of commercial and clerical staff. The Board itself stated the need for release "to enable trainees of all grades to make the fullest possible use of the further education facilities that are available."

The Shipbuilding Industry Training Board has emphasised the need for training in the industry. The first year full time training scheme and the boat-building centre at Southampton are obvious results of its efforts. The delay of its sub-committees in providing training recommendations may have hindered initially the development of training for all grades and in all firms. Training and education facilities have developed without the benefit of this advice and may have to be modified. In the long

term the structure of the industry should assist the Board to achieve its aims. The large shipbuilders can hardly afford to ignore a levy of a thousand pounds, or indeed to provide training inferior to that of their competitors. The boat-building have the problems of a small labour force and limited facilites. The provision of training centres on the Southampton model may help to solve these problems. The Shipbuilding industry has had a good record of training. In Sunderland the Shipbuilders initiated the first sandwich scheme in 1903 and are the only industry to have all first year apprentices in full time training. In order to meet International competition it is the task of the board to ensure that these traditions are built upon by every firm in the industry and for all grades of trainee.

NOTES

1. Statistics of employment in the Industry in this and the following paragraph are from "Abstract of Regional Statistics, No. 3., 1967." HMSO. Statistics are for June 1966.

2. See Appendix IXb.

3. The information on the progress of the Board is extracted from the "Newsletters" of the Shipbuilding I.T.B. which are circulated to all employers and are available from the Board. Each board must also submit an Annual Report to 31st March. These are published by HMSO.

4. August 1965.

5. Op. cit. page 10.

6. Shipbuilding I.T.B. Annual Report, 1966-67 p. 11.

7. Shipbuilding I.T.B., Newsletter No. 6., Dec. 1967.

8. Obtained from registers at Monkwearmouth College.

9. "Training for Commerce and the Office," HMSO, 1966.

10. Shipbuilding I.T.B., Report to 31st March 1966. HMSO 1966, page 14.

11. Annual Report to 31st March 1967. This table (which relates levy and grant) is reproduced as Appendix II Table (a) of this thesis.

12. Annual Report to 31st March 1967 p. 20.

13. 1966-67 Report p. 18.

14. 1965-66 Report p. 8.

15. See note 11 above.

16. The firm at the top of diagonal e - e'

17. Diagonal L - L'

18. The proposal to decrease the levy to 1.1%, the lowest taken in a full year of operation, for 1968-9 further emphasises this point and is to some extent an admission of failure. Proposals to decrease levies are further discussed in the last chapter of this thesis.

19. Appendix VIII Table (b) The comparable figure for 1967-8 is 58.9%.

CHAPTER FIVE

THE WORK OF THE CONSTRUCTION INDUSTRY TRAINING BOARD.

The Construction Industry employs 1,631,000 men, only 62,000 less than the leading employer, Engineering.[1] Since 1945, the redevelopment of central areas of towns, the building of motorways, and the locating of industries on new industrial estates have been major contributors to the increase in demand for labour. Changes in building techniques have to some extent outdated the traditional methods of training, and it will be a primary task of the CI.T.B.,[2] in cooperation with Government departments, to forecast future developments and to organise training accordingly.

In the North East, Construction has been particularly important. New towns at Newton Aycliffe, Peterlee and Washington have been built. Development grants and sponsored Industrial Estates, combined with restrictions on building in the South and the Midlands, have encouraged new building. The desire to clear the North East's legacy of hastily erected Victorian housing and factories, with consequent redevelopment has been a further factor. Construction is the main employer of men in the region[3].

Sunderland represents the Construction industry in a development area. The town centre is being rebuilt. A new road system is under construction. Terrace houses near the centre are being demol-

ished and the occupants moved to new estates, including high-rise building, on the outskirts of the town. New industrial areas, including government trading estates at Southwick and Pallion, have appeared. The industry employs nearly, 5,000 men, ranking fourth after the traditional Engineering, Shipbuilding and Mining. Some of the main national training problems are apparent even in the limited example.

The redevelopment mentioned above is normally the work of large, often international firms. They employ a small number of highly skilled, key workers who travel the country. Locally a number of unskilled labourers are recruited. There is little demand in this type of work for the traditional skills of bricklaying and plastering. These are required by the small firms which undertake house repair or extensions. A large proportion of their workers should be skilled. The larger house-builders also require some skilled men, though industrial techniques are again reducing and changing the demand. A further problem for the industry is the wide range of work involved even within one sector. Bricklayers, joiners, plasterers, electricians, crane-drivers, mechnical engineers are only a few of the categories for which training schemes are needed.

The Construction Industry Training Board[4] was among the first group to be established in June and July 1964. Because of the diversity of work there are four separate committees, for Building, Civil Engineering, Mechanical Engineering and Electrical Contracting.

The initial task of the C.I.T.B. was to make a register of the firms under its aegis. The first list in 1964 showed 56,000 establishments; more than twice as many as any other existing board. Even this total excludes firms with a total payroll of under £3,000 per annum. The C.I.T.B. estimate that more than 20,000 jobbing builders come into this category. This exclusion enabled the Board to progress with its levy and grant procedure without the burden of locating these firms. They are allowed to take part in the levy and grant scheme on a voluntary basis. Sir Norman Longley, the Chairman, criticized some government departments for lack of cooperation at this stage.[5]

"It was a great shock to me in the early days to learn that we could not use the Register that was in existence under the administration of the Ministry of Public Building and Works and I will never be persuaded that we could not have had it."

The Ministry of Labour made a new list from its employment registers and sent out post-cards to all the firms concerned. The Ministry of Labour (D.E.P.) lists normally include details of those employers who have used their facilities in finding employees. If the recipient of the post card did not object he was put on the Board's register - "In this way we got a half-boiled list." When in 1967 the Ministry of Public Building and Works finally cooperated there were 8,000 further queries to be made. This strange blockage of the work of the Board is inexcusable. The Board has Parliamentary

approval to secure this information, so to withhold a simple list of names and addresses is unnecessary secrecy.

Once the C.I.T.B. had made its preliminary list the next task was to initiate the levy and grant procedure. Sir Norman Longley makes further comments on this.[6] "Perhaps at this stage I should point out the great strength of this act is its flexibility; that different industries can do different things to suit themselves; and I suppose there is no greater difference than the difference in the approach to the levy and grant system of the Engineers and the Construction people. The Engineers, who have a fairly sophisticated training history said, 'lets try and reflect the whole cost of training in a levy and set an ideal that is as near perfect as possible. We took the opposite line, 'let us start by having a small levy because we only want to collect the money we can spend wisely, let us start gently and work up from the bottom'." The 1965/66 levy in Engineering was 2.5% compared with 0.5% in Construction.

The specific aims of the Board are not set out in its publicity material. The general policy seems to be to offer grants and facilities to those interested, rather than to attempt conversion. The Chairman has stated "When you realise what it means to employers and employees in those firms which are fighting to the last ditch to survive - it is understandable that training is something that has to go out of the window."[7]

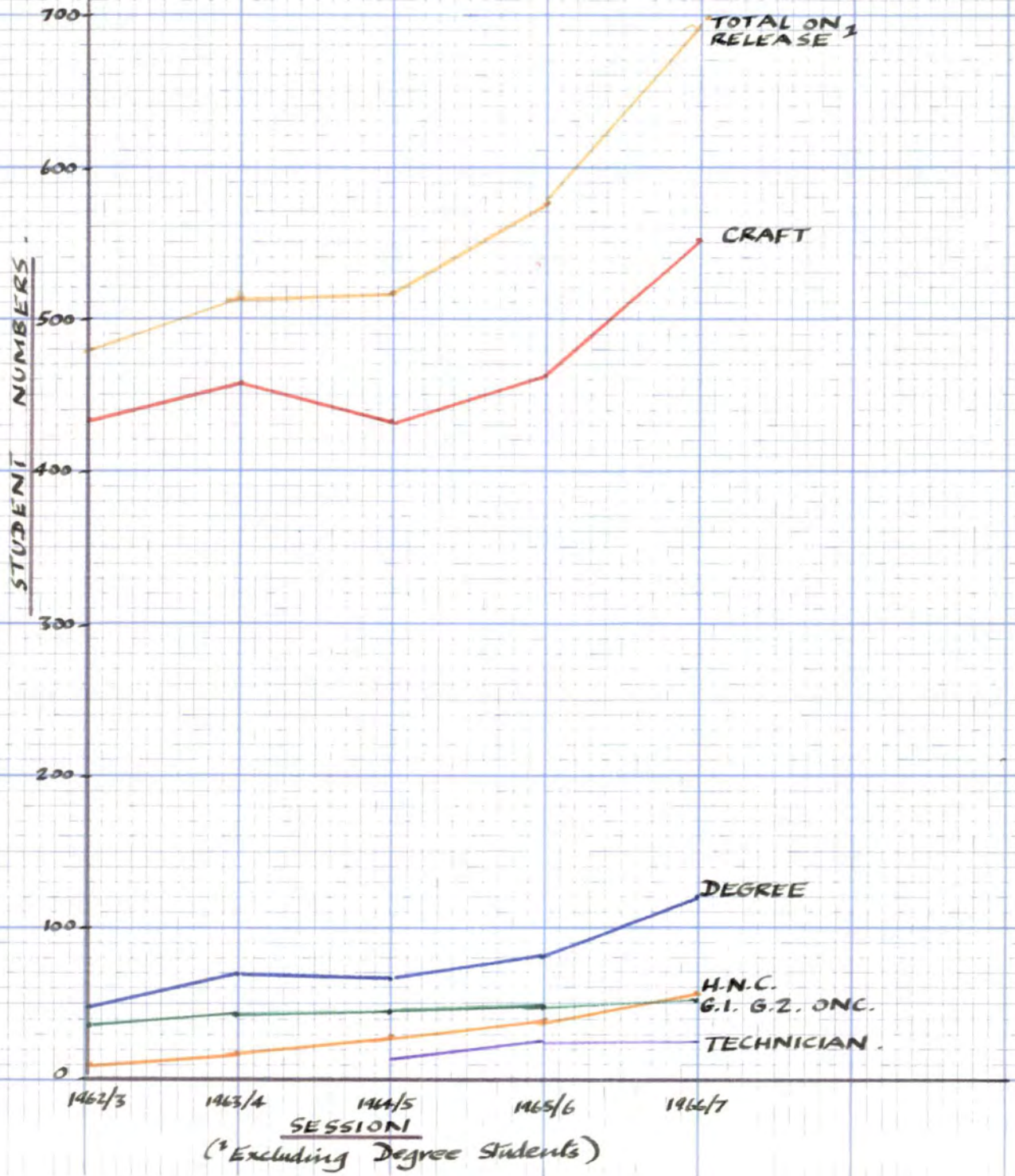
The Construction industry because of its diversity, and its weaker tradition of day release, offers a useful contrast to Shipbuilding and Engineering. Changes in the quantity, the quality and the sharing of costs are examined below, relating the detailed study of Sunderland to regional and national data. The chapter concludes with a summary of the present position.

QUANTITY OF TRAINING

The total numbers[9] released to building department courses in Sunderland show a steady increase from the very low year of 1955 when construction was restricted because of the Korean War. After this the numbers doubled from 109 in 1955 to 228 in 1961/2. In 1962 the Building Department moved from the main Technical College to a former Board School, which it still occupies. A further 162 students were enrolled in that year suggesting that limited facilities had been a factor in discouraging release.[10] A distinction must be made between students in the Building Department and students released by the Construction Industry. The statistics above include students from other industries, notably Shipbuilding, on courses such as painting and decorating and joinery. Statistics for release from the construction industry are given in Appendix IXa. There has been a slow development from 363 in 1961/2 to 393 in 1964/5 and 408 in 1967/8. The development of industrialised building reduced the labour force by over 10%[11] during the six year period and would slow the recruitment of new labour. A more detailed examination of courses illustrates the relative development of sectors within the industry.

GRAPH 3. PAGE 75a.

STUDENT NUMBERS ON CONSTRUCTION COURSES AT THE SUNDERLAND COLLEGES 1962/3 & 1966/7.



(1 Excluding Degree Students)

From 1962/63 to 1966/67 there was a general increase of 28% in Craft Level student numbers. The increase in the various sectors is not however uniform.

	1962-3	1966-7	
Brickwork	70	58	
Carpenters and Joiners	176	193	
Plasterers	38	49	
Plumbers	114	159	
Painters and Decorators	35	79	(Transferred from Art College '65)
Street Masonry	0	15	(begun 1965-66).
TOTALS	433	653	

The demand for bricklayers has fallen with the development of industrial building technique, similarly there has been only a slight increase in the number of carpenters and joiners. In interior work the growth has been more rapid, the increase in painting and decorating being accelerated by the transfer of these courses from the Art College to the Building Department at West Park. The only new course is in street masonry, for which Sunderland Corporation employees are granted release. The availability of the C.I.T.B. grants for the course may have stimulated this. A pre-apprenticeship basic course in building has been offered for three years but has never run because of lack of support. This is strange considering the success of the corresponding courses in Shipbuilding and Engineering. The extreme

mobility of labour and the weakness of the apprenticeship system in building are two major causes.

Courses at technician level as suggested in the 1961 plan[12] began in 1964/65 but have not been popular.[13] In 1966/67 there were only eleven in the second year and seventeen in the third. O.N.C. and H.N.C. courses have shown a slow increase since the Board's formation. The O.N.C. has developed from 38 on the three year course in 1962/63 to 46 on the two year course in 1966/67. The first year of the old O.N.C. and new technician's certificate are normally taken as G2 or G*. There were only 10 on this course in 1966/67 - this will result in a very low entry to O1 and T2, next year The H.N.C. course has grown steadily from 7 in 1962/63 to 19 in 1964/65 and 26 in 1966/67. At equivalent level the City and Guilds full technological certificate courses have also increased. They commenced in 1964/65 and had 21 students in 1966/67. At the highest level the C.N.A.A. degree courses in Civil Engineering[14] has increased from 47 in 1962/63 to 122 in 1966/67. It should be noted that only one student from a Sunderland construction firm was released for this course, even in 1966/67.

In summary there has been an increase in craft numbers despite a decrease in the trade's demand for certain craftsmen. The numbers on Technician and O.N.C. courses have not shown an increase and because of very low numbers on the introductory general courses, may actually fall next year. The numbers on degree courses have

increased rapidly but they are not from Sunderland firms. We may note here that no firm in the construction industry in Sunderland gave release to any commercial student, or indeed to any girl.

The construction industry is so diverse both in the size of firms and in the type of work undertaken that some attempt to analyse release by size of firms is relevant. All students entering the college fill in a form which includes the name of the employer. It is thus possible by counting and classifying to give a general picture of release. This appears as table (b) in Appendix IV. The weakness is that only firms granting release can be classified. Firms which appear on the Employment Exchange lists but do not grant release are also shown. There are probably a number of firms employing under ten workers who do not appear on either list. The first column of the table is therefore misleading in that more than the 90 firms shown are not granting release. It is unlikely that many firms with over twenty workers are omitted, so the remaining columns are substantially correct.

The obvious conclusion is that the size of the firm is a determining factor in the granting of release. Lady Venables[15] suggests that when staff are employed wholly in personnel work the numbers on release and indeed the integration between college work and factory experience is emphasised. She found that no firm in her sample, with under 250 employees had a personnel manager or

apprentice's supervisor. No firm with under 1,000 employees had a training officer. The number of training personnel is increasing rapidly as a result of advice and generous grants from the training boards. In the Construction industry in Sunderland only the Sunderland Corporation employs a training officer[16]. It has over a thousand employees. The only other establishment with over 200 workers is a national civil engineering company engaged on major building for the Corporation. The London office of this Company handles administration including training. The workers are on a short term contract until the central redevelopment is completed. Those shown on release from this firm are either continuing courses already begun in their previous employment or, in the instance of the four students on degree and H.N.C. courses, are on the permanent staff. This reflects the normal pattern in large construction firms of having a nucleus of permanent, highly trained staff who supervise local unskilled or semi-skilled labour.

No other construction firm in Sunderland has even a personnel department. The general manager and his staff are thus responsible for the selection and training of employees. This important task must compete for managerial time with the more immediately rewarding task of securing and fulfilling orders. The great variety in the amount of release given by small firms is thus an index as much of managerial interest in training, as of the actual needs of the firm.

The 45 firms with between 20 and 99 workers at least have office staff who can keep necessary records and make the appropriate returns to the C.I.T.B. Half the firms in this group granted release. It will be noted that of the 80 students released by the 22 firms, 76 were on craft courses. The other four were on Technician or General[17] courses. None were on higher level courses. There are two possible conclusions. Either the work of these firms does not demand high qualifications, or men with high qualifications are poached from other firms. In many firms undertaking limited house building and repair, only the managerial staff would need qualifications above craft-level.

The variation between firms undertaking very similar work suggests that the need for skilled men is not the main criterion. Two firms with 30 & 53 employees respectively, release seven employees each, yet half of the employers in this category grant no release at all and a further ten grant release to only one student. A firm with twenty employees would pay perhaps £150 to £200 in levy at 1%. The release of one apprentice on a day release craft course would recoup this. It is surprising that half of the firms in this group have not taken any advantage of the grants offered.

The six firms in the 100 to 199 category all grant release to at least three students each. The larger office and managerial staff may be a factor in this. An accounts department paying out

at least £500 in levy would call this to the attention of the management and at this size an assistant may well be deputed to supervise training as part of his duties. Again there is a marked preponderance of craft level students, but there are also ten students at higher levels including three on O.N.C. courses and one on an H.N.C. course. Five of the six are house builders, the remaining one being a large painting firm. Of the house builders, one small firm releases nine craft apprentices while one much larger firm releases only four. The one firm which releases over ten students is the biggest in the group and the manager is particularly interested in training. It is in this group that the greatest numerical increase is likely to occur in the next few years. All are giving some release and all are paying a considerable levy. The advantages of full time basic training for apprentices combined with the attraction of a £500 grant may well lead to the establishment of the course which the college has been offering without success for three years.

There are 109 employers registered as having under twenty employees but there are probably at least another fifty engaged in jobbing building, paint and repairs. Of these only 19 firms grant release. Of the 31 students, 29 are at craft level. The problems of these very small firms need special attention from the CI.T.B. The work they do is skilled but a good employer may well have only one apprentice or none at all. With an apprenticeship of five year

followed by a working life of forty years a good employer would only need to take on a new apprentice occasionally. Some small firms are therefore paying a levy with little chance of earning a grant. At the moment firms with a salary bill of under £3,000 need not pay a levy but this is only a temporary exclusion.

The training needs of the industry are so diverse that it is difficult to draw general conclusions. There are two obvious problems. There is a large element of shifting labour, most of the men are unskilled or semi-skilled. The organisation of a training programme for this group will be a major task for the Board. At present many firms are merely paying the levy as a piece of taxation. The second problem is to interest the smaller firms in training and to organise a group scheme to relieve general managers of the burden of administration. This type of scheme is now becoming accepted and it would have a considerable effect on both the quantity and the quality of training in Sunderland.

The problems illustrated in Sunderland are present throughout the country. The increase in the amount of training done is greater than the national average. In 1965/66,[8] 72,369 men and 478 women in the industry as a whole were granted day release. The total number employed is estimated at 1,750,000, which means that only 4% of the total labour force was released for training; 38.9% of boys under 18 were released compared with 44% in engineering and 52% in Shipbuilding. Apprenticeship is not so well developed in

the Construction Industry and a large proportion of workers are unskilled or semi-skilled men who will take a series of jobs and leave when a better one appears. The commencement of a new housing estate, or section of motorway brings a flow of these workers when the wage is high enough. The C.I.T.B. require that apprentices must be indentured, and that a record of training is kept. These are conditions of grant. The employer may well lose a high proportion of his staff during training. The wastage thus created could possibly be saved by making the continuation of training by the new employer compulsory. A levy of only 1% in a labour mobile industry is not likely to persuade firms to initiate training schemes. It does however compensate those which have a good training record.

QUALITY OF TRAINING

The Board did not appoint a chief training officer until January 1967. The Chairman explained that, "This did not matter as much as one might expect as we were not in a position to tackle training as such until we had the organisation to service our work."[18] Two full levy and grant operations were carried out without a senior executive to put forward what the grants should be for. Valuable work in coordinating the work of the various training committees could also have been done. It would seem that the problems involved in preparing training schedules are so great that a Chief Training Officer is essential long before recommendations

are ready to be incorporated in a grant scheme.

The Construction I.T.B. during its initial period of operation has had a policy of "going along with the good things already established in the industry." The 1966/67 Annual Report from which this quotation is made also states that the "Board has as yet few training advisers."[19] 31 projects in skills analysis were in hand by April 1967 but none was beyond the pilot stage and they represented 10% - 20% of the operations to be covered.[20] No revolution in the quality of training can be expected until these studies are completed and the firms and colleges concerned have time to conform to the proposed standards.

The quality of training is not controlled by inspection. The number of firms for which each training supervisor is responsible is more than three times that of any other of the five early Industrial Training Boards.

INDUSTRIAL TRAINING BOARDS ESTABLISHED IN 1964 : TRAINING STAFF IN RELATION TO ADMINISTRATIVE STAFF, AND NUMBER OF FIRMS COVERED[21]

(a) BOARD	(b) TOTAL STAFF	(c) TRAINING STAFF	(d) 0%	(e) NUMBER OF FIRMS	(f) NUMBER OF FIRMS TO EACH TRAINING SUPERVISOR
Wool	56	28	50%	2,288	82
Shipbuilding	45	14	31%	1,073	77
Iron and Steel	71	28	29%	638	23
Engineering	656	188	24%	29,000	154
Construction	500	92	20%	56,000	565

A detailed comparison between Boards is unfair on the basis of these statistics. The Iron and Steel Board began with a well established training system and the average size of firms is over 500. The Construction Industry is however very low in its training staff to administrative staff ratio. The Engineering I.T.B. which is the next lowest operates a complex grant procedure as explained in the next chapter. The last column shows the number of firms in each industry compared with the number of training staff employed by that Board. The Construction Industry Training Board is not able even to ensure that grants are earned with so limited a staff. The vital task of liaison with individual firms and colleges is hampered.

The two main contributions made by the Board to the quality of training within the industry are the establishment of a training centre at Bircham Newton in Norfolk and the active encouragement of group training schemes. The first course at Bircham Newton began in September 1966. Each course is full time for two weeks and trains a man to operate one item of very expensive machinery. The centre has over sixty machines including diggers, loaders, crane excavators and road rollers. These courses are being well supported by the industry since training is particularly difficult. Machinery of this type cannot normally be taken out of production to train a new man and it is obviously dangerous to practice on an excavator or crane without a carefully planned preparation. Over

500 trainees attended during the first six months and the industry's verdict was "just what the doctor ordered."[22] This centre directly implements the Industrial Training Act by improving both the quality and quantity of training. Like the Shipbuilding Industry's centre at Southampton its success may be a pointer to the future provision of training on a large scale provided at centres run by Industrial Training Boards.

The Board has also made a contribution to the problem of smaller organisations, by encouraging group training schemes. These schemes are mentioned frequently in the literature distributed by the Board. Part D of the 1966/67 Grants Scheme states, "these schemes will provide for members of the group, training facilities which would normally only be possible in a really large firm." C.I.T.B. grants cover 75% to 100% of the wages of group training staff and £2,500 is offered to offset initial development costs. In March 1967 a special booklet[23] was issued suggesting that a group of 50 - 100 Craft/Technician trainees would form a viable unit. A salary of £1,500 to £2,000 is advised for the chief training officer. Nine area schemes were operating by September 1967. The relationship between release and size of firm has been shown above for Sunderland. 49,000 of the 85,000 firms in the Industry are not subject to levy because their payroll is under £3,000. When they are included the development of group schemes will be vital.

The effect of the Board on the quality of training in Sunderland is difficult to assess. The publications of the board and the establishment of a levy must at least have brought training to the notice of management. There is as yet no group training scheme. The courses at the Technical College have not been affected except by a slight increase in numbers. The Building Department has not been visited by any representative of the Board.

SPREADING OF COSTS

The present levy in the Construction Industry is 1% of the total emoluments. Firms with a payroll of under £3,000 are not liable to levy but may volunteer to join the scheme. The Board regard this as a temporary exclusion in order to facilitate collection and distribution in the larger firms. More than 20,000 firms are so small that the levy would hardly repay the administrative costs involved, though in principle, since they employ skilled labour, they should contribute towards its training. The diversity of work within the industry makes an overall levy of 1% unfair to certain sectors. Some labourers earn very high wages because of overtime and incentive schemes yet receive little if any training. A firm engaged in the installation of heating and ventilating equipment on the other hand would have a very high proportion of skilled labour. To some extent the large scale construction firms support the builders and specialist firms. A

scheme relating levy to the use of skilled labour may be more equitable[24] but the size and diversity of the industry make even the collection of a basic 1% levy a major undertaking at present.

The 1966/67 Grant Scheme offered five types of grant. These are summarised in the Annual Report[25] for that year as:

A - "Fixed scale grants to employers basically for the attendance of apprentices and trainees at technical colleges or colleges of further education on day or block release;

B - Grants towards the costs of releasing staff to approved courses external to the firm;

C - Grants to employers employing specialist training staff and undertaking approved courses in "off the job" training within the firm;

D - Grants available to group training associations and to firms which join such associations;

E - Certain miscellaneous grants."

All employers were sent a copy of the grant scheme and they were reminded of specific details in a series of newsletters. Enquiries could be made direct to the Board or to the Regional Offices.

The 1966/67 Annual Report states[26] that "The year ended with a take up of claims under the first scheme little better than one in three of the firms that had paid levy". The Board reason that, "There is, and probably always will be, in the construction industry a number of firms which do not consciously undertake any training." They conclude, "In these latter cases the payment of levy with no offsetting monetary benefit is their due contribution

to the costs of training borne by other firms.[27] Here is one of the objectives of the Industrial Training Act fulfilled, but here also is a measure of the re-education task confronting the Board."

The report does not include a table to show the relationship between grant and levy. The analysis of the chart provided by the Shipbuilding I.T.B. offered valuable material. The pamphlet explaining the 1966/67 grant scheme specifically limits grant to six times the levy for any particular firm and indicates that some firms had received more than twenty times their levy in the previous year. This suggests that even a 1% grant helps to recompense those firms which in the past have trained men who have then joined other firms.

Details of levy and grant procedures are not published on a local or regional basis. The only evidence that is available for Sunderland is that suggested in the table above showing the relationship between size of firm and numbers on release. The disparity between firms of similar size and function suggests that some are justly rewarded by grants at the expense of others.

SUMMARY

The Construction Industry Training Board has made slow progress during its initial period of existence. The problems of the industry are such that the formulating of training schedules for all groups is a long task. Labour is often hired short-term and there is a

considerable movement between firms. Apprenticeship is not so strong as in Shipbuilding and Engineering. In contrast to these industries full time first year training has not been accepted. The Board has contributed to the aims of the Act by operating a system of levies and grants, by encouraging group training, and by providing a unique training centre at Bircham Newton. The levy has remained constant at 1% for the first three years but grant claims have been less than expected and at the end of February 1968 the Board had a surplus of £3¾ millions. The proposal to reduce the levy for 1968/69 to 0.7% is to some extent an admission of failure. The money in hand could be used to accelerate research into training and to provide a competent force of local agents. The employer who is reluctant to train his staff adequately is more likely to be persuaded by visits from a local man than by circular letters. The recommendations of the Board will not be fully appreciated, particularly by the very small firms, without a personal explanation. An increase in local staff would be a significant contribution to the quality of training within the industry.

NOTES

1. Statistics for June 1966 - (See note 1 Chapter IV).
2. C.I.T.B. - Construction Industry Training Board.
3. See Appendix 1 Table (d)
4. Details on the progress of the Board were extracted from the "C.I.T.B. Newsletters" which are distributed to employers at intervals.
5. In a speech opening a Training Division Conference of the C.I.T.B. at Bircham Newton, 15 May 1967. Copies of the speech are available from the C.I.T.B.
6. Ibid. page 2.
7. Ibid. page 3.
8. "Statistics of Education 1965; part two;" Tables 31 and 32.
9. Detailed statistics are shown in Appendix IV (a) and Graph 3.
10. Shortage of accommodation was also a limiting factor in day release at the National level. "It had been impossible to advance generally on the 1947 position, each improvement being more than off-set by the increasing number of students." Silbertson 1959 page 19.
11. Appendix IV Table (a).
12. "Better Opportunities in Technical Education", H.M.S.O. 1961.
13. Appendix IV Table (a) These statistics were obtained from college records.
14. Formerly the Diploma in Technology.
15. Venables, 1967, page 98.
16. Appointed in 1966.
17. These normally lead to Technician or O.N.C. courses.
18. Speech at Bircham Newton (see note 5 above.)

19. 1966/67 Report, page 11.

20. Ibid, page 17.

21. Adapted from a table used by the Minister of Labour in an article on Industrial Training in the "Times Educational Supplement." March 1st. 1968 page 698.

22. Quoted in "The Contractor," May 1967.

23. "Group Training Schemes," C.I.T.B., March 1967.

24. The problem of equating grants to training needs is examined in Chapter 8.

25. C.I.T.B. Annual Report 1966/67 page 25.

26. Ibid page 7.

27. The C.I.T.B. propose to reduce this "due contribution" by cutting the levy in 1968/69 to 0.7%. This is the lowest taken in any full year of operation.

CHAPTER SIX

THE WORK OF THE ENGINEERING INDUSTRY TRAINING BOARD

The Engineering Industry in the United Kingdom employs more labour than any other manufacturing industry, and employs more men than any other industry.[1] In the Northern Region as a whole it is second as an employer of men to Construction and in Sunderland second to Shipbuilding. The importance of the Engineering Industry as an employer of women must not be underestimated. In Sunderland almost 5,000 women are employed - nearly twice as many as in any other manufacturing industry. The light engineering industries established in Sunderland and other development areas require women for assembly. Few women are employed above operative level.

In 1961 there were 7,886 workers in Engineering in Sunderland yet by 1966 this total had increased to 14,186[2]. This rate of growth stimulates the demand for training particularly of new entrants. In this there is a marked contrast with the Shipbuilding Industry which during the same period decreased by 2,000 workers.

The Engineering Industry Training Board was established in July 1964 as one of the initial group[3]. There are now 28,000 firms on the Board's Register with a total labour force of three and a half millions. The levy in 1967/68 raised approximately £85,000,000 which puts the Engineering Training Board in terms of revenue and spending power, among the biggest firms in British Industry.

The scope of the Board is the whole of Order VI of the Standard Industrial Classification. The products vary in size from cranes to dentist's drills. The firms vary in size from the giant electrical combines manufacturing television tubes on a conveyor belt system, to the one man firm repairing machinery. The training needed is therefore greatly different, even within one firm. A girl can reach her production norm in valve soldering within two weeks, whereas a five year apprenticeship may be fully needed by an optical instrument maker.

In its first[4] circular to firms the E.I.T.B.[5] stated a policy of paying for the full cost of training. This contrasts strongly with the more modest aims of the C.I.T.B. as outlined in the last chapter. The levy taken in the first year was 2.5% of emoluments. This was more than twice the initial levy of the other early boards. A later information paper[6] succintly explained the aim of the Board;

"The aim should be to specify each job with such care as to know exactly what skill is needed to perform it; to select and train people in the most effective and economical way to do their work, and to test and ensure that, in the end, they have learned in all its stages to understand and to carry out the job that is required of them.

Employers who provide the facilities described will earn a higher grant payment. These facilities are not however an end in

themselves. They merely provide a framework in which good training can be given. The real purpose of training should not be obscured; it is to ensure that a firm's performance reaches the highest level of efficiency."

The E.I.T.B. used part of the 2.5% levy to establish a comprehensive advisory framework. The original training committee was replaced early in 1966 by eight new "Training Policy Committees." In order to emphasise the Board's policy at shop floor level nine regional centres were set up with teams of specially trained officer each responsible for a number of firms. The E.I.T.B. officer should be enabled to build up a liaison with these firms so that they are reminded of policies and benefits and equally so that problems can be fed back to headquarters. These officers also inspect training facilities to ensure that they meet the standards laid down by the Board for grant claims.

The Engineering Industry Training Board approached its task in a more vigorous manner than the two boards already considered. In order to assess whether the high levy and the large staff employed were justified an analysis of the work of the Board is made below. In order to facilitate comparisons with other chapters, the order, quantity, quality and sharing of costs is repeated.

QUANTITY OF TRAINING

The 1967 Annual Report of the E.I.T.B. contains useful statistics which show the magnitude of the task facing the Board.

The number of establishments on the register was 27,681 of which almost half had under 24 employees. 40% of the total employees however worked in firms of over 1,000. The table reproduced[7] below indicates the number of trainees in various categories in relation to the total number of employees.

ENGINEERING ITB 1967. MANPOWER AND NUMBER OF TRAINEES		
	No. Employees	Est. No. of Trainees
Managerial	117,413	2,913
Scientists & Technologists	60,583	13,223
Technicians	223,369	36,895
Other Administrative	569,221	33,878
Foreman	113,120	4,109
Craftsman	788,732	141,236
Operators requiring 4 weeks training	861,286	67,133
Others	889,776	8,113
	3,623,500	307,500

The E.I.T.B. had an advantage in the strong craft apprenticeship system and the tradition within many firms of day release during apprenticeships. The table above suggests that under 3% of managers, 6% of administrative staff and 4% of foremen were being trained at the time of the survey. This contrasts with 18% of craftsmen and 22% of technologists. In 1967/68, 75.8% of boys

aged under 18 were released. This is more than twice the national average of 36.3%[18] The figure of 12.9% of girls released from the industry indicates that outside the craft apprentice system there was more need for improvement.

The Board used four methods of persuasion. The levy of 2.5% made an impact in the boardroom and provided an incentive to recoup this large sum in grants. Detailed instruction manuals with required standards of achievement at various grades were made available as soon as possible. A comprehensive scheme for first year craftsmen was published in May 1966 and by Autumn 1967 there were over 50 other manuals available. Thirdly the team of local training advisers described above maintained a vital liaison with each firm. Finally group training schemes were actively encouraged.

The levy and grant scheme is unique and is examined in some detail because of its relevance to the purpose of the Industrial Training Act. The scheme was described in an Information Paper circulated in July 1965 and there have been few modifications since.

The firm's training requirement would be assessed, and the grant would then be paid as a percentage of the firm's levy, according to its <u>actual</u> training performance in relation to its training <u>need</u>. Crudely, a firm paying £10,000 in levy but only undertaking half the training that the Board thought appropriate would receive back £5,000 in grant. A firm undertaking more training than was necessary would receive an assessment over 100%

and would receive more in grant than was paid in levy. Some firms are reputed to have been assessed at 500% but no details are officially published. The performance rating was weighted for various grades of training. This may be compared with the points system used in allocating grants to state schools. The obvious problem is the time which this system would take to operate. Was the Board justified in bending its slender staff towards a complex system of improving the quantity of training? It may have been advisable for the first few years to pay grants for actual training and to concentrate all possible manpower on issuing advice on standards and methods.

In addition to the general grant scheme outlined above, supplementary grants were offered for "training to which the Board wishes to attach special importance." These varied from course fees for training officers to £140 cash for undertaking six months practical training of a student on a Dip. Tech. sandwich course.

The levy-grant, performance rating system should balance a firm's training programme against its training needs. The training programme depends upon a comprehensive advice being available from the Board. These training programmes are mentioned below in the assessment of the quality of training, but the availability and the standard of these manuals is also a factor in determining the quantity of training. The local officers described above are a further factor; the importance of liaison is stressed in the

concluding chapter of this thesis.

The fourth factor has not yet been discussed. Group training schemes were encouraged by the grant of £2,500 for initial expenses. In some areas the training workshop was located on the premises of one of the participating firms. A more controversial scheme was to establish twenty workshops at the Board's expense to train craftsmen and technicians. This type of provision is made by the Shipbuilding I.T.B. at Southampton and by the Construction I.T.B. at Bircham Newton but as has been explained these were for specialist groups in each industry. The possibility of a network of training board off-the-job workshops has been viewed with some disfavour by the technical teaching profession.[9] Existing instructors in Ministry of Labour establishments earn lower salaries and are generally less well qualified than those in technical colleges who do similar work. There is some fear of dilution and of a consequent decline in conditions of service if new training centres are established with an "instructor" rather than a "lecturer" emphasis. These fears may be groundless in that day release must be granted, in addition to off the job training, for the "educationa part of the course.

The principle of group training is important. A training officer is shared by the group and training is therefore not just another item on the list of the individual managers. Practical advantages in the more economic use of plant and instructors are apparent.

Information Paper No. 7 contained a significant pointer to the interest shown by some firms in the work of the Board. By June 1966, 16,000 of the 28,000 firms concerned had submitted claims. 43% of the engineering firms with a total wage bill of over £5,000 were either doing no training or were not willing to keep the records necessary to establish a claim. Of the 57% who did claim, many had been four months later than the official closing date. The E.I.T.B. emphasised that in future any claims submitted after a stipulated date would not be considered. The amount of paper work involved has been criticised. A large electrical firm's representative stated in evidence that two full time secretaries were employed solely to deal with the E.I.T.B. correspondence and that half of the Education Officer's time was consumed in compiling and checking records and statistics required by the Board.[10] The amount of paper work may make some smaller firms reluctant to claim for the training that they do.

The success achieved nationally by the Board in increasing the quantity of trainees is suggested by the day release statistics for the industry. Since any young person who receives over four weeks training must be granted release as a condition of grant these statistics are a useful guide.

STUDENTS AGED 15-17 ON DAY RELEASE AS A PERCENTAGE OF TOTAL EMPLOYED IN AGE GROUP 1962-3 to 1967-8[11]

ENGINEERING	1962-3	1963-4	1964-5	1965-6	1966-7	1967-8
Boys	60.3	61.3	62.5	69.9	76.1	75.8
Girls	8.7	8.3	8.0	9.5	11.1	12.9
NATIONAL AVERAGE						
BOYS	30.3	30.2	31.0	32.6	34.3	36.3
GIRLS	7.4	7.1	7.3	7.7	8.5	9.2

In the two years before the establishment of the Board the percentage increase in day release for boys is 2.2%, this can be compared with an increase of 13.6% in the two following years. There is only a marginal increase in the national figure. There is also an increase of 3.1% for girls in engineering compared with a decrease of 0.7% in the preceeding two years. In order to illustrate these crude figures an analysis is made below of the work of the E.I.T.B. in Sunderland.

A wide range of courses to O.N.C. level is offered at the West Park College. Higher level courses are housed in the main

Technical College. It is the policy of the college to discontinue evening only courses. In 1967/68 there were only 240 evening class students. Of these 211 were over 21 years old and were completing courses which are being phased out. If a student is not granted release by his employer he will not now be able to obtain a college course. The importance of the E.I.T.B. schemes is thus emphasised. The employer who has a poor performance rating is unlikely to be able to obtain good apprentices, since the Youth Employment service considers training facilities in placing school leavers.

The number of students at the College depends on the order book. In Sunderland the total employed in Engineering has grown by 1,600.[12] The number of engineering workers has doubled since 1956. We should therefore expect a rapid increase in student numbers even without E.I.T.B. influence. The number of school leavers is also higher. As the Crowther report pointed out even to maintain the present proportion of day release would be an achievement because of the greatly increased numbers involved.[13] It goes on to state that "The Educational system can play only a contingent role in the English day release system. The presence or absence of students depends on employment and not on educational policy". This is illustrated by the first year basic training course at West Park which is directly affected by the number of apprentices taken on in any one year. In 1966/67 the number was 101; in 1967/68 it had fallen to 35.[14] Expensive equipment and specially appointed lecturers are therefore under used.

The general pattern of release between 1962/62 and 1966/67 is shown in Appendix Table VI (a) and in Graph 4. The total on release shows a remarkable increase. In fact numbers have doubled over the four years, from 662 - 1,395. In 1965/66, the last year for which employment figures were available, 1,400 students were on release out of the 12,244 employed. The 12,244 includes 4,326 women of whom only 10 were on release. There is thus still some potential for release especially among non-apprentice employees. The rate of growth has however been much greater than in the other departments at the college.

The table below summarises the growth. Craft courses have developed most rapidly.

RELEASE STUDENTS ON ENGINEERING COURSES 1962-63 TO 1966-67

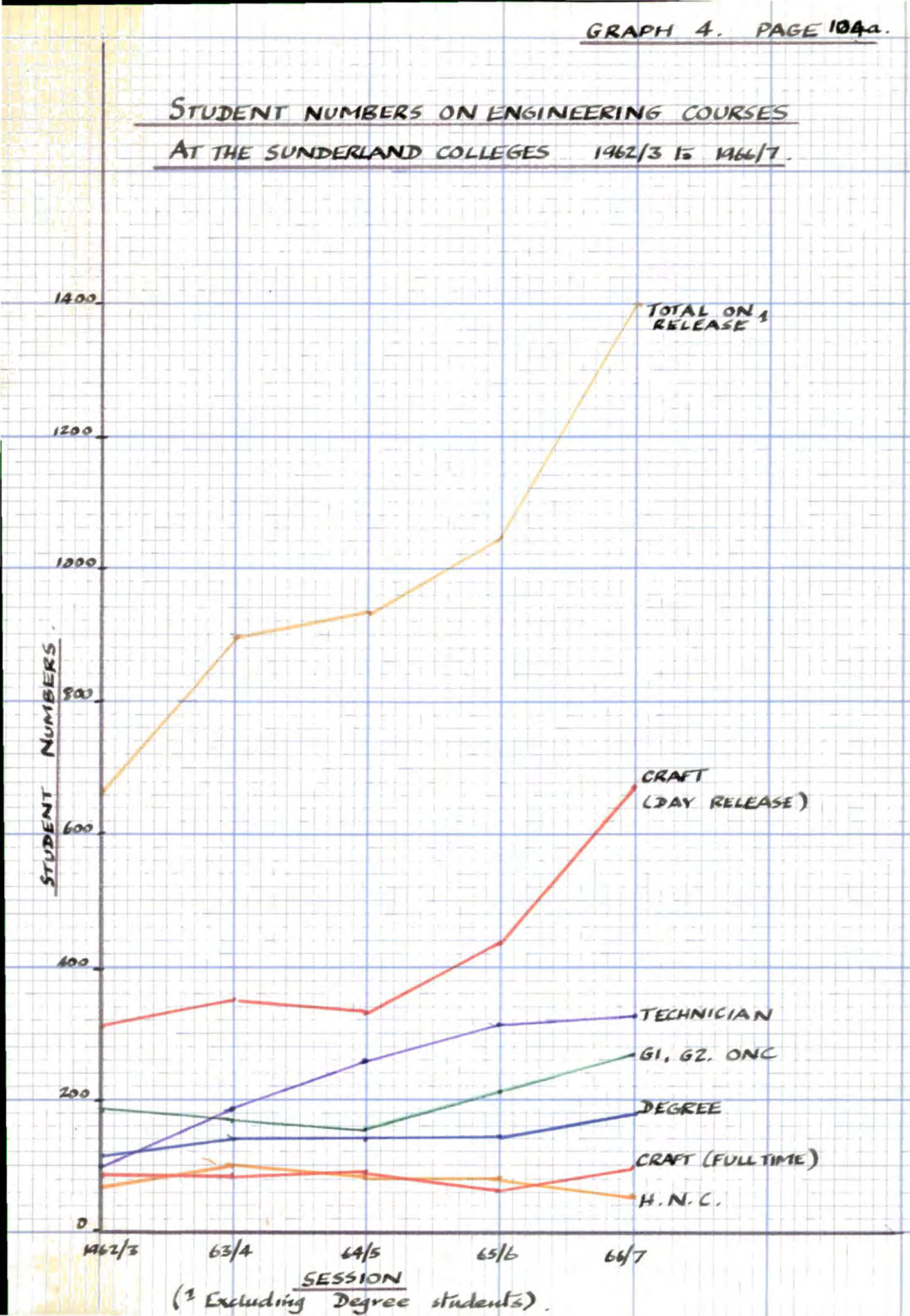
	BASIC FULL TIME	G1/2	O.N.C.	TECHNICIAN	CRAFT	H.N.C.	TOTAL
1962/3	-		180	99	308	75	662
1963/4	85	50	116	193	347	105	896
1964/5	97	67	85	263	331	89	932
1965/6	71	103	105*	312	420	88	1,093
1966/7	101	97	170*	322	676	58	1,395

These total s include a new block release course with 8 students in 1965/6 and 29 in 1966/7. SOURCE: Annual College returns made in November to the Department of Education and Science.

The E.I.T.B. must take credit for this. The initial emphasis was on craft training and particularly on the first year full time course. Numbers on craft courses doubled between the establishment of the Board in 1964 and the 1966/67 session. The increased numbers in the industry and the extended accommodation at West Park are contributing factors.

The first year full time course was pioneered by the college and local firms before the existence of the Industrial Training Act. Numbers have increased steadily but recently some firms have begun their own off the job training with the encouragement of

STUDENT NUMBERS ON ENGINEERING COURSES AT THE SUNDERLAND COLLEGES 1962/3 to 1966/7.



(1 Excluding Degree students).

substantial grants for equipment and staff. The college enrolment for the 1967/68 session is only 35. As has been mentioned this is partly due to the reduced number of apprentices entering employment, but firms undertaking their own training contribute to this decrease. This is a poor reward for a college which introduced full time training two years before the E.I.T.B. recommended it. The staffing and equipment for a full time course of 100 students is expensive. To have 35 students using these facilities is tragic. It is the duty of the E.I.T.B. to examine this problem and to give Local Authorities firm guarantees that changes in policy will not lead to waste on this scale. A plan for the next ten years is needed, with a detailed forecast of requirements for each area.

The numbers on O.N.C. courses fell from 180 in 1962/3 to 35 in 1964/65 but have recovered to 141 in 1966/67. The decrease was the result of the change from a three year course to a two year course. The former first year is now within the general course.[15] Another factor is the improved selection which the general course provides. Thus the large numbers who previously failed O.N.C. should be guided at an early stage into a more suitable course. The rapid growth of the technicians course is partly a result of this redistribution.

The Higher National Certificate Course is held at the main Technical College. Numbers have fallen steadily since 1963/64.

Again changes in the system of courses are the main factor. The H.N.C. with endorsements is no longer recognised as a qualification for membership of the Institute of Civil Engineers. Sandwich diploma or degree courses are therefore now preferred. The generous grants offered by the E.I.T.B. for these courses have played their part. The first year enrolment for Higher National Diplomas in engineering has increased from 30 in 1962/3 to 55 in 1966/67. Similarly electrical engineering degree students have increased from 33 to 66 during the same period. Courses at this level draw from the whole of Britain. Only three of the 66 students mentioned were on release from Sunderland firms.

The recent developments in engineering courses in Sunderland are thus encouraging. There has been an increase in numbers at all levels. This may be the result of the good firms granting more release or it may, as the Industrial Training Act intended, be the result of more firms realising the value of education and training. In order to examine this problem, a detailed examination was made of every enrolment card in the 1966/67 session. A classification of release by size of firm was then made.[16] To obtain further information a questionnaire[17] was sent out to the 24 firms with over 20 employers. This was based on the E.I.T.B. form S.2. asking for numbers employed and numbers in training in various categories. A summary of these results appears in the Appendices.[1] Appendix VI Table (b) shows all of the firms listed by the Sunderland employment exchanges with the addition of those firms

which are not listed but do grant release to the College. As with the Construction Industry table it is likely that a considerable number of small firms are not included. The figure of 17 firms in the category 1 to 19 is probably less than half of the actual total.

The relationship between size of firm and the granting of release is again apparent. Of the 24 firms with 20 or more employees, 22 grant release. Only 10 firms under 20 grant release; perhaps a quarter of the actual total. There is also a correlation between the size of firm and the level of training. Fourteen of the sixteen on release from the "under twenty" firms are on craft courses. For firms with 200 or more employees the craft trainees are outnumbered by those at higher levels. The relationship is not as straight-forward as the table suggests. The numbers and levels of workers on release may well be as much related to the firms organisation as to its training needs Some of the smallest firms undertake precision engineering, often requiring original work. The firms of a thousand employees and over are, with one exception, engaged in mass production with little need for skills. The actual structure of sample firms in relation to training may be derived from Appendix VId which is based on the questionnaire and on visits to the firms.

For the firms with under twenty employees, numbers on release are small. The establishment of a group training scheme would

seem worthwhile since a substantial number of small firms all without training officers or training facilities are located in a concentrated area. A typical firm visited is shown in column A[19]. The ratio of five craftsmen to one operative illustrates the skill needed in the small, precision engineering firm. Only one craft apprentice was on day release. The general manager stated that he did not have time to study the E.I.T.B. policies and grant schemes but he did now keep records of the trainee's progress and received a grant for him. A group training scheme would obviously be of value to the general manager in that its training officer would be able to relieve him of this responsibility and advise him on training.

The second group, 20 to 99, are similar in that most of them are making small components for other firms. Again a high proportion of skilled men is necessary. Firm B with 24 employees had 10 craftsmen of whom 4 were on day release. Firm C makes very similar products and has a similar structure with 32 employees of whom 17 were craftsmen yet none of these were on day release. A larger firm in the same branch of the industry is illustrated by firm D. Of the 86 employees, 52 are craftsmen and 8 are technicians. 15 students were on release. This is probably a result of the general manager's interest in training. When asked about the possibility of block release he made the interesting point that in precision engineering the trainee could leave his work on the bench on Tuesday and return to it after his day's release

on Thursday. Block release would disrupt production schedules. Despite his interest in training he would not allow release with pay for two draughtsmen and a senior clerk who were over 21. He considered that he was being generous in allowing them time off to attend courses during the day, provided that they made up this time by evening and Saturday work. The E.I.T.B. grants should ease the burden on all of them. He had never been contacted by the Technical College or by the E.I.T.B. directly, though he received periodic reports from both. He had no idea of what the labels G*, G2, O1, etc. meant on the reports he received from the college and had never seen a syllabus. He was however enthusiastic about the liaison with the Government Training Centre, from which he received weekly reports on the work done by his trainees and the standards achieved. It would seem that a similar service from the technical colleges with personal visits from lecturers and from the E.I.T.B. representatives would achieve more than the present general exhortations. This man had fifteen students on release yet had little idea of what they were being released for. It is likely therefore that the great majority of firms have even less idea of what is taking place in the colleges.

There were only two firms in the 100 to 199 group. Firm E is engaged in assembly and is similar in structure to the largest firms. Of the 128 employees 95 are unskilled or semi-skilled and of these more than half are women. There are only ten craftsmen and one technician. Only one person is on release. Though this

firm is undertaking less than its share of training the proportion of one is 128 is misleading. The E.I.T.B. performance rating makes an allowance for this type of firm where, though the total wages bill is high, the demand for skill is low. In the schemes of most other boards this firm would receive a minimal grant return on a large levy. The remaining firm in this category is in precision engineering and therefore resembles the other firms considered. It is the smallest firm sending a student on the first year full time course.

In the next group, 200 to 999, no firm has an office staff of less than 40 and one has 115. Some of the office staff can be detailed to process E.I.T.B. correspondence. Each firm has at least a personnel officer and the larger ones have training officers Each of the firms grants release to all apprentices. This record is not maintained overall. None of the 115 clerical and commercial staff in firm F are granted release even though the Monkwearmouth College is less than a mile away and has sent descriptions of the courses available to this firm. One firm was declared bankrupt during this investigation but in the other four firms only 14 of the 358 office staff are granted release.

The four firms are very different in training policy. Firm G with 406 employees, including 57 craftsmen and 6 technicians, send only 8 on day release courses. Firm H with almost a thousand employees has 72 craftsmen and 25 technicians and sends

only 9. In contrast to these, Firm K with 708 employees has 150 craftsmen and 37 technicians with 31 on release and Firm F has 445 craftsmen and 47 technicians of whom 30 are on day release and 65 on block release.

The fifth firm in the group produced marine engines and was forced out of business by a gradual decrease in demand for the type of engines in which the firm specialised. Unfortunately, this firm has a very good training performance with 72 students on release; including 13 on the full time basic engineering course, 4 on advanced courses, and one on a sandwich degree course. The link between further education and local industry is clearly shown here. "The handmaiden" may lose a significant proportion of students when a local firm closes down. In authorities where Pilkington[21] proposals are being rigidly applied this may lead to the closure of classes. In this instance, the E.I.T.B., local unions, and employers found positions for all the indentured trainees with a guarantee of their being allowed to continue their present courses. This recognition of the individual's right to complete his training is an indication of the more favourable attitude towards training in general which has been encouraged by the Board.

The five firms with over 1,000 employees are also varied in their training needs. Two are heavy engineering firms producing industrial machinery and engines. Firm L with 1,445 staff has 632 craftsmen and 77 technicians. This firm releases more thsn

any other in Sunderland with 31 full time basic students, 62 craft apprentices, and 119 higher grades on release. A grand total of 211. This firm also has 21 administrative and office staff on release, which underlines the principle that release is most readily given when the firm is big enough to employ full time training staff. The other heavy engineering firm has a similar training pattern with a total of 138 on release.

The other three firms assemble small consumer goods on a flow line basis. There were all visited, since their training performance appears incredibly poor - they have only 92 on release out of their combined labour force of over 6,400. The largest is Firm M with 4,196 employees. The classification of employees explains the fact that only 32 are released. There are only 179 craftsmen and technicians and of these 22 are released a reasonable proportion. 10 of the 249 administrative and office staff are released, an unreasonable, but normal proportion. The bulk of the labour force is the 3,400 operatives who need less than four weeks training. A 2.5% levy on these operatives wages for one year must total over £25,000,[21] yet after a short on the job training period they are working at the full quota rate. The establishments N and O are parts of the same company and a similar pattern of short initial courses is apparent. Each has a well qualified and experienced training officer. Firm N[22] has only 3 of its students on release. The training officer explained that the 50 craftsmen and technicians were all on maintenance and

repair work and because of redundancy, they were nearly all long term employees already trained. Only 3 apprentices had been taken on in the last five years and they were all on release. There were 665 operatives out of a labour force of 753; 635 were women and only thirteen were being trained. This is a good example of the firm where employees have stayed with the firm and therefore reduced its present needs to train new staff. The girl reaches full production rate in four weeks and in eight weeks is fully competent. It is difficult to see how these girls can be given more training. The only possibility is release for a more general education in terms of the 1944 Act. Neither the personnel officer, nor the girls interviewed thought that this type of release would be common in the forseeable future. Indeed the girls said that they enjoyed the work, in that it was so repetitive that they could gossip. The factory was clean and warm, and had facilities such as a hair dresser and a social club. They would be most reluctant to leave this environment and "go back to school". Experience with clerical girl operatives compulsorily released by the Civil Service confims this.[23] Few operatives in 1967 are in a position where their "minds are left without the means of obtaining that knowledge which they so ardently desire."[24] The opportunity for those who wish to further their education and perhaps progress to more responsible positions could be made available within the E.I.T.B. schemes.

Establishment O, which is the second factory of this firm has

a higher proportion of skilled men and consequently, a higher proportion on release. 39 out of 1,187. Though this proportion is only 3%, the training officer is most enthusiastic. He sends his sixteen scientists and technologists on University short courses. All of his apprentices under 21 obtain release. He emphasised the need for good secretaries and had four girls on release. His firm was prepared to offer commercial apprenticeships but could not obtain trainees with the minimum G.C.E. qualifications required. In contrast to this, he would not grant day release to students over 21 though he would allow them to attend day courses and make up the time by evening work. The firm had its own operative training bay but this was not in use at the time because all of the 82 operatives had been trained. When asked what influence the Training Board had on the firm's policy he replied, "None. We now pay a levy on our 1,200 operatives but none of them need more training than we are already giving them. The new grant for operative training under four weeks will bring our grant very near to our levy." This firm very closely resembles the typical large construction firm with a small highly skilled team and a large labour force of unskilled and semi-skilled operatives.

A comparison may be made between release in the construction and engineering industries in Sunderland.[25] There were only eight construction firms with over 100 employees. They granted release to 123 trainees. The twelve engineering firms with over 100, granted

release to 583 trainees. They tended to be bigger than the construction firms. The 12 firms with 20 to 99 employees in Engineering release 68 students whereas the 45 constructional firms of similar size release only 80. This may be partly due to the difference between the two Boards, but a major factor is the strong apprenticeship pattern in Engineering with its consequently more stable labour force. The small size of the construction firms is also a factor. 109 were registered as having under 20 employees, compared with the 12[26] registered for engineering.

There is also a marked differences in the level of training undertaken in the two industries.

SUMMARY OF APPENDIX TABLES IVb AND VIb

LEVEL OF COURSE	ENGINEERING	CONSTRUCTION
Basic	70	0
Craft	256	194
Intermediate	243	21
Advanced	60	11
Higher	38	8
TOTALS	667	234

The striking difference between the numbers in intermediate and more advanced courses may be in part due to the different structure of labour within the two groups of industries. It is unlikely however that the engineering industries require more than

ten times the future technicians and technologists, within a labour force only twice the size. It would seem that Engineering employers are more responsible in the granting of release and very much more responsible in the encouragement of their employees to continue their studies into higher grades. The basic full time first year apprentice course is strongly established in the Engineering Industry but in Sunderland despite frequent exhortations from the Board and publicity by the Sunderland College this course has never yet received sufficient support to be able to begin in Construction.

No construction firm was found to grant release for secretarial training. A few used T.W.I.[27] or C.I.T.B. courses for managers and foremen. The larger engineering firms were more encouraging in releasing their non-apprentices. Even here none approached the recommendations of the Central Training Council.

It is not easy to summarise the effects of the Engineering Training Board. Before its establishment, the Engineering industry had always been at the top of the day release table. The E.I.T.B. has produced detailed training recommendations which should make this established quantity of training more effective. The quantity of training has increased but not so markedly as in other industries. The apprenticeship system with release to technical colleges is well established. Group training schemes for smaller firms are the only major innovation. The E.I.T.B. is

more considerate than the other boards in the function of spreading the cost of training. This chapter has emphasised the great variety of training needs, ranging from the highly skilled "one-off" factory to the conveyor belt firm with little need for skill.

QUALITY OF TRAINING

As has been mentioned above the E.I.T.B. has been active in preparing training manuals and in providing local officers to advise and inspect training done to these programmes. It is not the purpose of this thesis to discuss the validity of programmes produced by a particular board or to comment on the standards achieved within individual firms. Some comparison may however be made between the service provided by the E.I.T.B. and the two boards previously reviewed. For both of the latter long delays in producing guides to training have been a factor in restricting the training programme.

The E.I.T.B. began by asking employers for details of training already being done. A questionnaire based on one of the forms used is included as Appendix VIc of this thesis. From the returns the Board were able to compile lists of trainees at various levels within the industry and to compile lists of those granted day or block release to technical colleges.

In September 1965 employers received an information paper

suggesting basic principles of good training. A special effort was made to encourage the training of supervisory staff;

"In order that foremen and other supervisors may be equipped to carry out their duties effectively they should be trained in supervision. In addition, many supervisors play a vital part in training because they may have charge of trainees. Firms should give sound training both to existing untrained supervisors and potential supervisors either by mounting training programmes themselves or by releasing their supervisors for courses at technical colleges or other approved establishments."

Early in the following year a very comprehensive manual on basic training was circulated.[28] This included sets of drawings for practical work. It was designed to be a manual for instructors on a full time one year basic training course. It was an important innovation in that common standards throughout the industry were introduced. There has been some criticism from Technical College lecturers that the scheme is too detailed and leaves little initiative to the teacher. The E.I.T.B. point out that this is for, "the guidance of instructors without previous experience." The Board has a duty to improve the quality of training and therefore is within its rights to suggest ways in which this training should be carried out. A national scheme in which instructors, lecturers, students and employers know exactly what is being taught is probably the most effective way of increasing numbers on release and

decreasing wastage. The Board will only approve schemes[29] which provide:

"1. Off the job training for the whole of the first year.

2. Day release or block release to a technical college for an appropriate course of study.

3. Supervision by trained instructors.

4. A planned programme of practical experience which is broadly based.

5. Adequate instruction and safety training."

This is the essence of the Industrial Training Act. The basic problem has been that the scheme is for a 48 week year whereas the normal teaching year in technical colleges is 36 weeks. Where the technical college staff have been required to cover the 48 weeks a staggered holiday system has been introduced, often without proper consultation with the teaching staff involved, though consultation at higher levels between the E.I.T.B., Directors of Education, and Principals of Colleges did take place.[30]

A trainee is released for 48 weeks and the firm receives a grant of £10/10/- weekly, totalling £504. for the full course. Technical colleges providing facilities are paid by the firms sending students. The course is in three parts.

(a) Induction - a bridge between school and industry

(b) Acquisition of basic skills

(c) Initial development of skills in one branch of engineering.

After the first year a scheme of training modules[31] was proposed. Ideally a firm in consultation with the local officers of the E.I.T.B. and the technical college would select, "the most suitable combinations of training for their potential craftsmen." The Information Paper which introduces the modules scheme (no. 6 May 1966.) states that;

"As each training and experience module is completed together with the associated course of further education, the standards reached will be tested and the success endorsed on the basic certificate. A minimum requirement for the qualification of craftsmen could be the endorsement of at least two training and associated experience modules, i.e. after a total of three years of training. Craftsmen with a broader range of skill would take longer to train."

This paragraph suggests two significant changes in apprenticeship which would answer the criticisms made by Lady Williams.[32] Each module of training would be tested and a qualified craftsman would have written endorsement of his particular skills. A future employer should therefore be able to appoint a man with full confidence in his ability. An employer able to make a job specification could advertise for a craftsmen with the required specific qualifications. Since the number of training modules undertaken would depend upon the ability of trainees and the needs of the firm the length of apprenticeship would vary. There are

obvious problems not the least of which is that apprentices of the highest abilities would remain unqualified for longer than those undertaking a shorter training. This salary problem could be solved however and is a small price to pay for a flexible system. This would come near to the standards of the Western European countries praised by Lady Williams. An instruction manual for each module is to be produced by the Board. The Information Paper for September 1967 lists 50 of these manuals as completed.

The Board has experimented in direct teaching by collaborating with the B.B.C. and the City and Guilds of London Institute in producing a series of 20 television programmes to illustrate Syllabus 393 (First Year Certificate in Engineering Craft). The complete series is available on video-tape and selected instructional sequences on 8mm: film loops.

The examples of the work of the Board in providing training advice outlined above suggest that the industry is progressing towards a fully planned and documented training structure. The local officers of the Board have the very important dual function of ensuring that all employers and training personnel are aware of the standards and methods advised and that they comply with the requirements of the Board in order to earn training grants. The encouragement of group training schemes for small firms is a factor in ensuring quality of training.

The effects of the policy of the Board on the quality of training in Sunderland are very difficult to assess in that this would involve an expert enquiry into the standards achieved in each firm. The basic full time course at the West Park College has suffered in that some firms have now set up their own training workshops and one large firm is offering places to others in its vicinity. The problem has been mentioned in terms of quantity of trainees but whether quality will be improved by the dispersal of 100 students between firms rather than continuing the centralisation in the fully equipped and staffed workshops at the college is debatable. The divorce between training and associated education may be accelerated by the policies of the Board. This is indicated in two new sentences in the 1968/69 scheme for electrical craft apprentices.[33] "Practical assignments are intended to illustrate the principles of electrical technology and science included in the syllabus. They are not intended to offer practice in craft skills which is the responsibility of industry." These ideas appear in several new syllabi which are being prepared in conjunction with the E.I.T.B. This is a dangerous situation if it leads to a division in the students mind between industrial practice and college theory. These are possibly short term problems and are partly the result of the ad hoc nature of training before the advent of the board. Some firms have for many years had integrated training workshops and some technical colleges have been training centres for their district. If a uniform

system of factory based training and college based education is desirable some sacrifice is unavoidable. The danger of dichotomy must be minimised.

The training facilities of the college had been inspected by officers of the Board but no report had been received. This procedure was also criticised by two of the personnel officers visited during the questionnaire. Both the college and the firms had been told by the regional office that the results of inspections were confidential. If this is the general practice of the Board, firms will be unaware of the inadequacies in their training facilities and can hardly therefore improve their quality.

No other evidence of changes in the quality of training were available. No major changes had occured within the West Park College. New training workshops had been opened by some firms and advertisements for training officers and instructors appeared regularly in the local papers. It is too early however to assess the quality of the training being done. Indeed a further decade may be necessary before any impact is made on industrial efficiency by the newly trained entrants.

SHARING OF COSTS

The taking of a levy from all firms and the paying of grants to those undertaking satisfactory training is an effective but

crude system of sharing costs. The firm with a large pay-sheet but a small proportion of skilled labour subsidises the firm based on a small highly trained team. The performance rating scheme of the E.I.T.B. is the only attempt to deal fully with this problem.[34] There has been considerable criticism of this scheme by employers. It was described by witnesses before the Select Committee on Estimates as "completely chaotic" and "incomprehensible." The E.I.T.B. claim that it takes account of the fact that, "some employers employ more skilled manpower than others, and must, consequently, carry out more training than others if they are to make a fair contribution to providing the trained men and women that they need."[35] The crude grant for courses does not fulfill the requirement of the Industrial Training Act that costs of training should be shared fairly between firms. The E.I.T.B. are the only established board to attempt to rate training actually being done against training needed and to award grants on the basis of the relative performance.

The scheme operates by multiplying quanity by quality - in theory therefore this should also fulfill the other two aims of the Act. The quantity factor is the number of trainees as a percentage of the total number of employees in each of four categories. Information Paper 9 gives the example that a firm with 400 craftsmen of whom 80 are in training would have a quantity factor of $\frac{80}{400} \times \frac{100}{1} = 20\%$

The quality factor is rather more complex. The information paper states that, "The standard of training facilities is assessed from the information provided on form S3. and in those sections of S2 which report on further education and the numbers of training staff." Marks are awarded for various aspects of training, thus day release for all craftsman trainees gains 10 marks and the employment of satisfactory training staff for operative training gains 15 marks. The total of marks on each category is then expressed as a percentage of the "ideal" total. To continue the example above, the quantity factor of 20% would be multiplied by the quality factor, e.g. 65% to give a combined figure of 13% for the craftsman category. The results from each of the four categories are added to give the final rating, which then determines the actual grant. There has been criticism that the quality assessments and final ratings are not disclosed to firms so that they do not know where they are at fault.[36] This would ssem a reasonable criticism which could be very easily put right.

There are two important features in this scheme. The firm which needs skilled labour but does little training is clearly penalised. Secondly the firm which employs a large proportion of unskilled and semi-skilled labour does not subsidise the firm with a high proportion of craftsmen and technicians. In most training board schemes payment is made for training done and levy is on total salaries. There is no relationship to the training

actually needed. The E.I.T.B. has the most equitable system of sharing training costs and the levy to be shared is more than that for any other board. The penalty is the number of administrative staff required to operate the scheme and the undue emphasis therefore placed in the early years on the levy grant procedure.

SUMMARY

The scale of operations mounted by the E.I.T.B. has been considerably greater than that for the other boards. Their levy yield (£75 millions) in 1966/67 was almost three times the combined levy yield of the other ten operating boards. The Board has led the way in publishing schemes for training, specific manuals, and even television series. It employs teams of local advisory and inspection officers. It encourages the provision of training supervisors and the grouping of small firms for this purpose. There are still areas of training in which the policies of the board are little heeded; notably in management and clerical training and in the training of girls. The strong apprentice training system already existing has helped the Board in its tasks but there can be little doubt that during the first four years of operations the Board has made considerable progress towards the objectives of the Industrial Training Act.

NOTES

1. Appendix I Table (d).
2. Appendix IX Table (b).
3. Details of the Board's activities are summarised from the "E.I.T.B. Information Papers". These are circulated to employers and are available from the Board.
4. "Information Paper No. 1." March 1965.
5. E.I.T.B. Engineering Industry Training Board.
6. "Information Paper No. 3." September 1965 page 3.
7. "Annual Report 1966/67" page 21.
8. "Statistics of Education," 1967/68 H.M.S.O.
9. See letter to the "Times Educational Supplement" 17th November 1967., and a series of letters and articles in "The Technical Journal."
10. "Manpower Training for Industry," HMSO 1967., paragraph 701.
11. For other industries see Appendix VIII Table (b).
12. i.e. 1961/66 Statistics for Sunderland Employment Exchange Areas.
13. "15-18", page 352.
14. See Appendix VI Table (a).
15. Only the second year of the General Course (G.2.) is in operation at the college. (The pattern of recommended courses is shown in Appendix I Table (c).)
16. Appendix VI Table (b) - this may be compared with Appendix IV Table (b) for Construction.
17. A copy of this questionnaire is included as Appendix VI Table (c).
18. Appendix VI (b).

19. These statistics are for existing firms but names are withheld.

20. Committee on Technical College Resources - report on "The Size of Classes and Approval of Further Education Courses" H.M.S.O. 1966.

21. 3,400 workers at £6. a week would yield £26,526 at $2\frac{1}{2}\%$

22. Establishment N is included in this category though it has only 753 employees because it is a twin factory of the firm in Column O.

23. The writer discussed the problems of release with clerical operatives at the Monkwearmouth College in the 1966/67 session. Compulsory release was ended from 1967/68.

24. George Birkbeck 1799 (Quoted in Tylecote 1957).

25. Appendices IV (b) and VI (b).

26. This figure is probably less than the actual total.

27. T.W.I. "Training Within Industry." - short courses organised at Government Training Centres.

28. "First Year Training for Craftsmen and Technicians."

29. See Appendix V Tables (a) and (b).

30. See "The Extended College Year". - Policy Statement of the Association of Teachers in Technical Institutions.

31. Appendix V Table (c).

32. See Chapter I.

33. City and Guilds Course 347, Syllabus 1968/69.

34. A scheme related to training needs is being discussed by the Iron and Steel I.T.B. for the 1969/70 session.

35. "E.I.T.B. Information Paper No. 9.," September 1966.

36. "Manpower Training for Industry," H.M.S.O. 1967, paragraph 688.

CHAPTER SEVEN

COMMERCIAL AND CLERICAL TRAINING

In the preceding three chapters the developments in training and associated education in three major industries have been considered. The problems and solutions are in part peculiar to each industry; a fact recognised in the structure of the Industrial Training Act. The present chapter examines Commercial and Clerical training in order to attempt some comparison between boards in a common field. Important factors to be considered in this are the influence of the Central Training Council, the development of release in a hitherto "evening class" sector, and the training and further education of girls. The Central Training Council has a particular responsibility to advise training boards in sectors common to all. The individual board should then adopt these recommendations with any necessary modifications. The three industries considered in the preceding chapters have an accepted tradition of release. Even within these industries release of commercial and clerical trainees was less accepted. The release of female trainees was almost unknown even though they formed the bulk of students at evening classes.

The recommendations of the Central Training Council are summarised and the extent to which these have been adopted at national level are considered. In the second part of the chapter

the actual effects on the appropriate courses in Sunderland are examined.

In 1965, 40.2% of girls and 10% of boys entering employment took up clerical and commercial posts. The Central Training Council in reporting this[1] state that;

"It is essential that so large a section of our country's youth (one might almost say, 'one quarter of our future') should have adequate training and further education at the start of their careers."

The West Park College in Sunderland (Engineering, Construction, Shipbuilding, Mining) is now almost wholly concerned with release courses. At Monkwearmouth, where the majority of students are girls, the evening class is still necessary. In 1967/8 there were over a thousand students attending in the evenings.[2] This contrasts strongly with the total absence of evening courses for young men at West Park. In 1966/67 there were 650 girls on evening secretarial courses compared with 652 in 1964/65, the year of the Industrial Training Act. Over this two year period the number on Day Release Secretarial Courses increased from 36 to 45. Why have the Industrial Training Boards failed to persuade the employers of the value of day release for clerical staff?

The Central Training Council published detailed advice in a book called "Training for Commerce and the Office" which appeared early in 1966. It was hoped that the individual Training Boards would adopt these recommendations with any modifications necessary for their own needs. In order to formulate these suggestions, the Central Training Council made a survey to examine the present pattern of training in the office. A sample survey of 8,000 firms was undertaken. This asked for numbers employed, numbers of trainees in various categories, numbers on day release and for details of internal training schemes.

An internal training scheme constituted:

(a) an induction programme;

(b) formal training away from the work place;

(c) planned rotation between departments;

(d) a planned syllabus.

Only 209 of the 1,617 establishments selected for analysis had even this minimal training structure. Less than a third of firms with office staffs of over 100, had training schemes. Those firms which were able to obtain advice and training grants from an Industrial Training Board should have progressed more than those still outside the scope of the Act. In fact only 10% of firms in Engineering and 9% of those in Construction had schemes. In Shipbuilding no firm at all had an office training programme. This

compares with 21.2% in Chemicals and 18.8% in Transport, which were not served by a Training Board at the time of the survey.

This is a depressing sample. The only reassuring factor is that 108 of the training schemes had been established since 1963. Perhaps at last the report of the McMeeking Committee[3] endorsed by the Henniker Heaton Committee[4] and given a more practical form in the Industrial Training Act is beginning to persuade employers that commercial training is worthwhile. Increases will probably be startling over the next decade. The effects this may have on the colleges of further education may be deduced from the Central Training Council's survey on day release for clerical staff.

Table 2 of the Report[5] gives details of Office Staff under 21 who are granted release for further education.

EXTRACT[6] SHOWING NUMBERS OF OFFICE STAFF UNDER 18 RECEIVING FURTHER EDUCATION ON RELEASE AS A PERCENTAGE OF THE TOTAL EMPLOYEES IN THE AGE GROUP

Public Administration	25.9%
Gas Electricity and Water	25.4%
Agriculture Forestry and Fishing	22.2%
Engineering	19.8%
Mining and Quarrying	16.7%
Metal Goods	15.0%

Food, Drink and Tobacco	5.2%
Insurance Banking and Finance	4.3%
Transport	3.9%
Bricks, Pottery, Glass, Cement, Etc.	3.5%
Miscellaneous Services	3.0%
Distribution Trades	1.9%

Four of the first six groups contain a large proportion of public employees. The Henniker Heaton Committee states that, "The example which public authorities can set to other employers in their day release practice is of great importance." "We recommend that all public authorities, national and local, should give a clear lead in the granting of day release."[7] Though public administration tops the list, 25.9% is not a particularly inspiring lead. All Civil Servants under 18 have a right to release but this is terminated at 18 unless the student can prove that he had not yet completed an essential course. Local Authorities vary greatly. The Sunderland Local Authority released only two clerical employees to Monkwearmouth College in 1966/67. Even trainees who actually work in the offices of Colleges of Further Education have to attend evening classes.

Engineering and Metal Goods are the only two manufacturing industries to appear in the top six. The Engineering I.T.B. and the Iron and Steel I.T.B. circulated booklets to their members on clerical training and offered substantial grants. The number of

large firms in the two industries is also a factor in providing a training structure encouraging release.

The bottom six includes two manufacturing industries. The Training Board for Food, Drink and Tobacco was not established until August 1968, and release in this industry is low in all departments - only 11.6% of employees under 18 were released in 1965/66. "Bricks, Pottery, Glass, Cement etc." come under the supervision of the Ceramics, Glass and Mineral Products Industry Training Board. This was established in July 1965 so that its recommendations on clerical training would not be received in time for the 1965/66 academic session, on which the Central Training Council's survey was based. It is possible that there has been a considerable development of release over the last two years. The first training board to cover a part of the transport industry was established in September 1966. Again we may expect an increase in the present 1967/68 session.

It is unfortunate that the other three industries in this group are those which have a very high proportion of commercial and clerical employees. "Insurance, Banking and Finance," is to some extent redeemed by the fact that 40% of the establishments in this group have internal training schemes. These will not normally be sufficient to earn training board grants without release for further education. The performance of the "Miscellaneous Services" and the "Distributive Trades" is lamentable. The

long promised training board for Retail Distribution was not established until August 1968 and has a difficult task before it.

Table 2 of "Training for Commerce and the Office" also states the numbers on release in various categories. "Professional trainees" are normally released. Seven of the industrial groups release all trainees in this category, only four release less than 50%. If this is compared with secretarial staff there is a marked discrepancy. Only 52 of the 349 private secretaries involved were granted release - 47 of these were from Engineering firms. This leaves only 5 on release out of the 249 private secretaries, employed in the other twenty-three groups. Only 6.4% of the 6,208 typists were released. No industrial group released more than 18% of its typists. This grave injustice must be rectified. It is unreasonable that apprentices in a firm are released while clerical trainees in the same firm have to attend evening classes. A structuring of contracts of employment with necessary training and education is needed.

This survey of training in Britain was then compared with training in other European Countries in Chapter Three. If Britain is to enter the Common Market, training standards must conform. There is a considerable variety in training structures at present. France, Italy and Belgium rely on full time courses whereas Germany, Switzerland, Denmark and Norway have commercial apprenticeship schemes with compulsory release to colleges. The

Central Training Council's report concentrates on Germany and Denmark. In both countries a carefully planned and supervised internal training scheme, in order to give a broad base of experience, is required. At the end of the apprenticeship period there is an examination. The Central Training Council concludes that the main lessons for Britain are:

(1) "That an employer taking on a young person has a duty to provide a reasonable standard of instruction and a fairly broad introduction to business."

(2) "An essential part of this instruction is further general and commercial education."

(3) "The trainee will attain a minimum level of competence."

The final part of the report contains detailed recommendations on both internal and external training. These are sufficiently flexible to be adopted by the individual training boards. The recommendations to the boards are summarised in paragraph 129.

"We have attempted to establish a framework within which, commercial training can be developed on sound lines. This framework consists essentially of:

(a) a planned programme of induction, basic skill training and experience on the job;

(b) adequate arrangements for the supervision of training.- both at company and office level; and

(c) linking of appropriate further education with training (on a day release or similar basis).

We recommend that industrial training boards' schemes make

it a condition of grant to firms that the training provided for young office staff meets these conditions." This report is particularly concerned with young office staff. It will be followed by recommendations for older employees. Intensive retraining courses are necessary for married women who return to the office after a gap of perhaps ten years.

These recommendations are clear. Since the report was published by the Ministry of Labour, and contained advice from a council specifically established to assist the individual training boards we should expect that this advice would be passed on to employers without delay. The recommendations were made in April 1966. In March, 1967, B.A.C.I.E. published a progress report on the work of the boards.[8] Only the Iron and Steel I.T.B. and the Electricity Supply I.T.B. had actually published recommendations on clerical training, though grants were being paid by other boards for release to existing courses.[9] In all of them day release for courses such as the Certificate in Office Studies earned a grant.

The encouragement, and the grants available to the three industries which have been the particular concern of this thesis vary considerably. The Construction I.T.B. offers a grant of £2/10/- for each day of release to an approved course. This is the same rate as for basic craft courses in other parts of the industry. Off the job training within the firm is reimbursed at

the rate of 75% of costs and 100% of wages. Courses in office studies and business studies are listed in their handbooks and grant schemes. Clerical training is mentioned occasionally in publicity material. Newsletter No. 3[10] has a column on the training of office workers which mentions the Central Training Council's booklet and points out that, "only 10% of office staff under 21 receive further education by day or block release." Special short courses at seven colleges are recommended. These are mentioned again with the addition of four more colleges in a "Press Release."[11] The Construction I.T.B. are providing grants equal to those for other trainees, and they are informing employers of the courses available. There is however no emphasis on the importance of commercial and clerical training. In the 47 pages of the 1967 annual report it is not even mentioned.

The Shipbuilding I.T.B. are even less encouraging. The first Newsletter to employers (August 1965) states that grants will be paid for the "external training of craft instructors, training officers, safety officers, supervisors and managers." Commercial staff are not even mentioned. The report on the first year of operation published in March 1966 contains a survey of manpower and training at 13th November 1965, a year after the Board was established. There were 2,062 male and 2,901 female secretarial staff. Only 79 were registered as trainees, and of these only 26 obtained day release - 26 out of 4,963. Administrative and

commercial staff fared little better. There were 3,631 employees of whom 3,008 were men, 65 were trainees and 42 obtained day release. This unsatisfactory situation must to some extent be blamed on the lack of encouragement by the Shipbuilding I.T.B.

Commercial and Clerical Training is not mentioned in Newsletter No. 2[12], but in Newsletter No. 3,[13] which explains the 1966/67 grants scheme [illegible] there appears this paragraph;

"Grants in respect of commercial apprentices and all clerical or commercial employees under 21 (or under 18 for girls) who are provided with off-the-job training or associated further education will be payable on the same basis as for other apprentices and subject to the same terms and conditions except in their application to reimbursement of the trainee's wage or salary, which will be limited, for this category of employee, to 50% of his or her salary during the period of release." The Shipbuilding I.T.B. clearly place less value on the training of girls than the training of boys, and consider that grants for commercial and clerical training need only be half of those for other staff.

The recommendations of the Central Training Council, outlined at the beginning of the present chapter, were considered by a special sub-committee of the Shipbuilding I.T.B. The newsletters give the following progress reports;

(1) January 1967 - "Recommendations covering the training of young commercial and clerical workers will shortly be passed to the

appropriate employer and trade union organisations and Departments of Education for comments."

(2) June 1967 - "The comments of the employer and trade union organisations and Departments of Education on the draft recommendations covering the training of young commercial and clerical workers are still awaited."

(3) December 1967 - "A training policy statement is to be issued shortly."

It is not surprising that the annual report for 1966/67 records that no grant claim whatever was made for commercial and clerical training.[14] The Shipbuilding Industry Training Board was not fulfilling its obligations under the Act for commercial and clerical training.

The grants for commercial and clerical training available from the Engineering Training Board are within the general grant scheme. Administrative, technical and clerical staff occupy one category in the performance rating scheme. A firm which released few clerical staff would have low quantity and quality factors in this category and would lose grant. The Information Papers contain references to commercial and clerical training but this has not been given the same publicity as schemes for other trainees. Information Paper 3 (September 1965) is the first to mention this branch of training. It states that pending the recommendations of the Central Training Council, "firms are expected to release their junior clerical and commercial staff for suitable courses at technical colleges." A training policy committee for commercial training was established early in 1966.

Information Paper 10 (March 1967) makes a practical contribution to commercial and clerical training. From 1st Septermber 1967 all clerical and commercial trainees up to the age of 18 must receive day or block release for further education as a condition of grant. This stipulation has had some effect locally and should be a regulation of all Industrial Training Boards.

The E.I.T.B. do call the attention of their employers both to the training of clerical and commercial workers and to the training of women in general. Failure to undertake this training will affect the performance rating of a firm. There has not been a training handbook on this sector and there has been no particular emphasis on its importance. The atmosphere is of mild recommendation rather than active persuasion.

This attitude seems common throughout the Boards. Only the Iron and Steel I.T.B. and the Electricity Supply I.T.B. published special training recommendations before the 1967/68 College session. The Iron and Steel I.T.B. circulated "Recommendations on Commercial and Clerical Training" in May 1966. The schemes are very similar to those recommended at this time by the Central Training Council. The booklet gives clear advice on training procedures. It recommends that day release should be available until at least the age of 21. Block release is strongly recommended as an alternative. The Board encourages a career structure. "Clerical trainees who achieve passes at credit level in three

subjects of the Certificate of Office Studies should be encouraged to take a course leading to the Ordinary National Certificate in Business Studies and Day Release or Block Release should be extended for this purpose." A pamphlet of this type at least makes the employer aware of what he should be achieving. If it is followed up by visits from local officers of the Board who emphasise its importance a considerable improvement could be made. The Electricity Supply I.T.B. published a similar pamphlet in September, 1967, entitled "The General Training of Clerical Staff." The introduction makes the valuable suggestion that, "Electricity Boards should also review the records of existing clerical staff and arrange that those members whose previous training or experience does not match the general training outlined in this recommendation are given the opportunity of training in those aspects of work in which their experience has been deficient."

This account of the work of the Training Boards in the Clerical and Commercial field suggests that there has been some neglect of duty. In order to illustrate how little impact the Industrial Training Act, as interpreted by the Boards, has had, we may examine the recent developments in commercial and clerical training at Monkwearmouth College.

COMMERCIAL AND CLERICAL TRAINING IN SUNDERLAND.

All courses in clerical training, and courses in commercial training below degree level are held at Monkwearmouth College. The

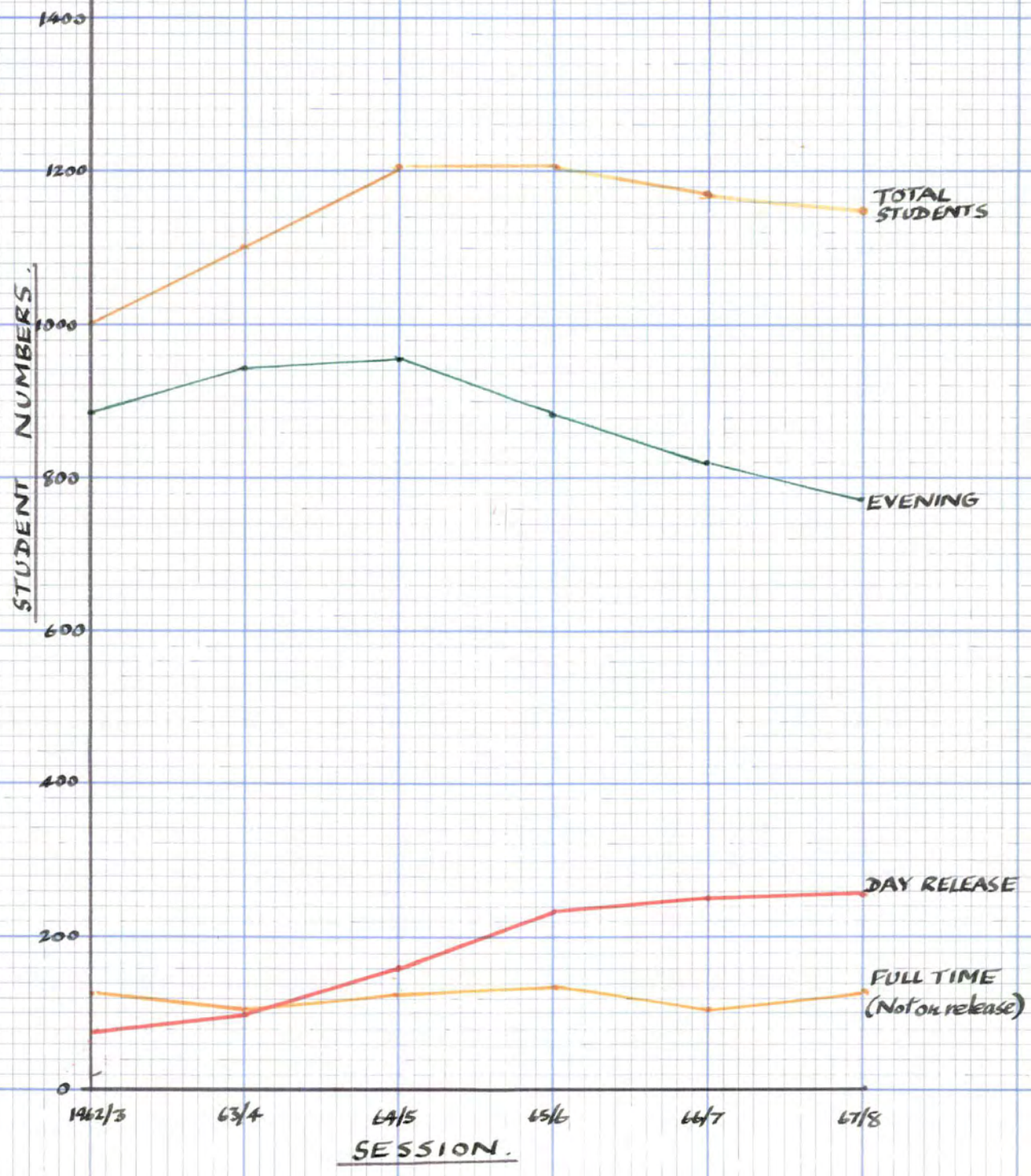
development of courses in the Business Studies department is therefore a good indication of the effects of the Industrial Training Act on release in the Sunderland District.

BUSINESS STUDIES DEPARTMENT : NUMBER OF STUDENTS ON VOCATIONAL COURSES 1962/3 TO 1967/8[15]

	1962/3	1963/4	1964/5	1965/6	1966/7	1967/8
FULL TIME	122	102	120	127	103	125
PART TIME	84	104	183	217	252	257
EVENING	889	946	955	882	815	815

These figures illustrate three lasting features of commercial further education. Over a hundred girls in each year are taking the two year full time courses in secretarial studies. These are normally begun immediately after leaving school at fifteen. There is no scheme for a full time basic training course on release, as there is for boys on most craft courses. Secondly there are almost 800 students in each year who have to attend evening classes in order to obtain qualifications. Thirdly, part time day release has trebled over the four years. The increase between 1962/63 and 1964/65 is however greater than that between 1964/65 and 1967/68. Was the bark of the Act more effective than its bite? The increase in day release is a considerable achievement but the fact that three

STUDENT NUMBERS ON VOCATIONAL BUSINESS STUDIES COURSES; MONKWEARMOUTH COLLEGE 1962-3 to 1967-8.



times as many have to attend evening classes is deplorable.

The individual courses are grouped for the annual returns to the Department of Education and Science and we may conveniently use these groupings to illustrate their development. Table (a) of Appendix VII shows the statistics and graph 5 illustrates these figures. Courses are available in both Business Studies and Secretarial Studies, these will be considered separately. The O.N.C. in Business Studies, is offered both as a day release and an evening course. The day release course has grown more quickly, though both have fallen in the last year. The day release total has fallen again to 41 at the beginning of 1967/68. This decrease is in part the result of National Coal Board redundancies in the area.[16] Some students have left the Coal Board, but more importantly few new staff are being recruited and therefore numbers at O.N.C. level have fallen. The only other advanced day release courses in Business Studies are for Cost and Works Accountants and for Legal Executives, these are shown as "Intermediate Professional." The Cost and Works course in particular has developed, especially since 1965. Provisional figures of 1967/68 show a further increase of 28. The legal Executive course has declined and is only running in 1967/68 as a combined class of 6.

The most interesting classes from the Ministry of Labour, (D.E.P.) viewpoint are those which do <u>not</u> run on day release. Courses were advertised for Certified and Corporate Accountants, Company

Secretaries, Chartered Insurance Institute, Institute of Bankers and the Building Societies Institute. None of these have had more than 5 applicants in any year since they were offered, yet all run a evening classes with a minimum enrolment of eight.[17] There is no lack of demand. The following courses are offered only in the evenings - there has never been any demand from firms for a day release course; Chartered Institute of Secretaries, Corporation of Secretaries, Institute of Hospital Administrators, Institute of Municipal Treasurers and Accountants, Institute of Export, Institute of Transport, Local Government, Road Transport, Salesmanship, Industrial Assurance, Storekeeping, Office Supervision. In this group too, the evening classes have sufficient numbers to continue. Notable among these are Institute of Municipal Treasurers and Accountants, Local Government and Institute of Hospital Administrators. "We recommend that all Public Authorities, national and local, give a clear lead in the granting of day release.[18] It would seem that a full Industrial Training Board for local government should be established. If the local authorities hope to recruit good staff in the future they must at least offer release facilities as good as those of their competitors in industry. The voluntary organisation for training in Local Government, established in 1967, will not have the powers of the Industrial Training Boards.[19]

The secretarial courses are offered both as day and evening

courses. The wastage on evening only courses is severe. Each year achieves a certain standard in typing and shorthand and is therefore complete in itself. The small number continuing to higher levels is disturbing. Courses over 6 years involving 3 evenings were offered but the last three years had to be combined. An examination of the 1964/65[20] registers reveals the following:

SHORTHAND AND TYPING CLASSES - EVENING ONLY 1964-5

	ENROLLED	COMPLETED COURSE
1st year	209	102
2nd year	59	27
3rd year	57	37
4th year (combined with 5th and 6th years)	33	21

NOTE

"Enrolled", means to attend at least one class.

"Completed Course," means attended at least one class in the summer term.

It was not found practicable to trace the progress of individual students, since this involves tracing names through a series of registers, many of which are later combined even during one year. The college has no satisfactory reference system for individual evening class students.

This wastage is not only serious as a waste of talent. It is normal practice in commercial colleges to cram classes into rooms at the beginning of the year and to engage part time evening class teachers, who are then progressively dismissed as the classes dwindle. This caused considerable inconvenience to the staff and students involved. A girl may well find herself in three different classes in the one year. This in itself causes wastage. Rooms and equipment are idle for the latter part of the year. The small group who are determined to achieve top secretarial posts, attend three nights a week for at least four years. Their sacrifice is rewarded because they are so few. Wastage in the first year is very high; it is unreasonable to expect girls to attend three nights a week, when their friends in factories are earning more with minimal training. Some girls become disillusioned by the routine of classes and transfer to shop or factory work. In an interview with an employer in the Engineering industry in Sunderland it was mentioned that the had great difficulty in obtaining well trained secretaries. He was reluctant to grant release despite this because, "young girls are not reliable." There are no apprenticeship or similar agreements binding a girl to one employer even until she has been trained. The enrolment on the 1967/68 registers at Monkwearmouth shows that only sixteen employers are granting release to shorthand typists.

The Certificate in Office Studies and the General Commercial

Certificate are preliminary courses which allow entry to the O.N.C. in Business Studies for those without G.C.E. or C.S.E. qualifications. Though there are no commercial apprentices in Sunderland these courses have developed quickly. The General Commercial Course in 1967/68 has an enrolment of 44 compared with only 5 in 1963/64. The Certificate in Office Studies has 15 students in the 1967/68 session. These courses are being revised by the examining bodies in order to make them more suitable to industrial needs. The Head of Department concerned is hopeful that this will help him to develop them. Despite the very rapid growth of the day release, Senior General Commercial course the total numbers trained has in fact fallen. The evening course involves four evenings a week for one year and numbers decreased from 69 in 1962/63 to seven in 1966/67 and five in 1967/68. The Certificate in Office Studies which involves two evenings weekly for two years shows a similar decrease in numbers. There were 27 students in 1963/64, only 10 in 1966/67 and the same number in 1967/68. The increase in day release numbers was small so again there was a nett decrease in numbers trained.

The most flourishing day release courses in the department are in Retail Distribution. The total enrolments on day release courses were 25 in 1965/66, 45 in 1966/67 and 78 in 1967/68. In order to assess the reasons for this development and to examine training in an industry immediately before the influence of an industrial training board, a number of establishments in

Sunderland were visited.[21] It was clear that the expected training board was already having an effect. All the larger stores visited had, within the last few months, improved their system of individual training records, formalised their notes on training and regularised the times at which off the job training was given. One training officer explained that whereas she used to try to persuade the management to adopt certain improvements, they now come and ask what can be done. The work of the Distribution Training Board will be particularly difficult and it is unfortunate that the delay in establishing it has been so long. The main problem will be the very large number of small shopkeepers. In almost all of the local shops visited the family of the owner served behind the counter and organised stock. It was rare to find anyone under thirty. If this type of shop is levied it is very difficult to see what training they can be expected to undertake in order to earn a grant. At the other end of the scale there is a problem with the multiple chain stores. These all have well organised training schemes with a generous allowance of time and staff. None of the four training officers interviewed could foresee the possibility of the future training Board's demanding day release as a condition of grant. They were astonished to hear that the Ministry of Labour (D.E.P.) considered release essential for almost all trainees. The middle group, composed of large-r independent shops and the smaller branches of national stores, employ a considerable number of young

staff and are too small to have a personnel or training officer. This group release the bulk of students on present courses. The training board will have its problems. Numbers on retail distribution courses have more than trebled in three years at Monkwearmouth. The larger stores have revised and modified their training procedures. It is regrettable that the board to supervise these development is not yet fully operating.

This chapter has attempted to summarise the main features of commercial and clerical training and to illustrate this with examples from the courses at Monkwearmouth College. The only Training Board directly concerned with this sector is that for Distribution which was set up during 1968. There have been no published plans for training boards in other sectors such as banking or insurance. The main concern of this thesis is therefore the effect of the Industrial Training Act on commercial and clerical employees of establishments under the existing Training Boards.

The only way in which detailed statistics could be obtained at Monkwearmouth was to examine each register and note the names of employers granting release. This was done for the 1967/68 session. The employers were then assigned to the 24 groups of the standard Industrial Classification. Table (b) of Appendix VII shows the numbers released on three types of course. "Secretarial" includes all day release secretarial course

The Certificate in Office Studies and the Senior General Commercial course have been combined since they are similar in level of work and indeed take some parts of their courses together. The third group includes all Ordinary National Certificate in Business Studies students.

This is a very small sample, involving under 200 students but some tentative conclusions may be drawn. The two largest industries in Sunderland are engineering and shipbuilding. Both have industrial training boards which have been in operation for over three years. The number of commercial and clerical trainees from engineering was 63 compared with 4 from shipbuilding. The construction industry is smaller but the figure of five on release is little better than the record of the ship builders. The varying attitudes of these three boards have already been considered. The results speak for themselves.

The poor performance of the shipbuilding and construction groups was emphasised by the release in industrial groups ten and thirteen. In each of these there is only one establishment concerned. The rope making firm in Group 10 released 26 students. This included thirteen secretarial trainees - almost as many as the engineering industry. The glass making firm in Group 12 also had an excellent record with twenty on release.

The only other groups which approach double figures are 18

and 24. Group 18 includes the nationalised supply industries each of which has a training board. The nine students shown were released by the Water Board. The Gas Board in Sunderland does not release any trainees. The Electricity Board insist that all trainees attend release classes at Durham Technical College in order to simplify administration and liaison. Group 24 with 21 students on release is made up of employees in public administration. Only three are released by Sunderland Corporation The other 18 are civil servants, all of whom are granted a right to release. The difference between the Gas Board and the Water Board and between Local Government and Central Government employees should not exist.

The advice of the Central Training Council on Commercial and Clerical Training has had little practical effect; numbers on release have increased but are still very low in proportion to the very large number of young employees in this category. The overall number of students on further education courses has not increased because of a sharp decline in numbers attending evening classes. The present Head of Department has made every effort to inform local employers of what is available. A special leaflet was prepared on each course, prefaced by an explanation of the recommendations of the Central Training Council and a reference to the grants available. These were circulated to all known employers in the area. Copies were also sent to

employers' organisations, trade unions, and regional offices of the training boards. Advertising has little effect. Personal visits from the staff of the training Boards linked with discussions with college staff are necessary. The response to commercial and clerical training is so low that the possibility of establishing a Clerical and Commercial Training I.T.B. becomes worthy of consideration. This has a precedent in the Hotel and Catering I.T.B. which covers canteen staff in all industries. Commercial and Clerical training has been grossly neglected in the past; urgent measures are needed. The words of the President of the Association of British Chambers of Commerce must be brought to the attention of every employer in the country.

"There has been too much readiness to think in terms of the shop floor, the laboratory and the drawing office rather than the needs of the business as a whole.....The achievements brought about by the laboratory can be lost unless the commercial side is maintained at an equal pitch of efficiency."

These words were spoken at the inauguration of the Commercial Apprenticeship Scheme in 1957. Twelve years later the Central Training Council in its annual report for 1969 had to report that "Many employers are not yet convinced of the value of training office staff, particularly girls. This hesitation may be understandable but it is short-sighted. A disappointingly small number are also being given day release for further education."[22]

Schemes of training are available. The problem of persuading Training Boards and the employers in the industry to make use of these schemes lies at the root of the Industrial Training Act. There are no sanctions. This wider problem is considered in the next chapter.

NOTES

1. "Training for Commerce and the office," H.M.SO., 1966, page 1.
2. See Appendix VIIa.
3. "Report of the Advisory Committee on Further Education for Commerce," H.M.S.O. 1959.
4. "Day Release," H.M.S.O., 1964.
5. "Training for Commerce and the Office," p. 66.
6. The extract shows only the six groups with the highest and lowest percentage on release (Source - Training for Commerce and the Office," p. 66.
7. "Day Release," Paragraph 145 and 146.
8. B.A.C.I.E. "Industrial Training Boards Progress Report No. 2."
9. The Central Training Council's Annual Report in March 1969 shows that only seven I.T.B.'s had published training recommendations in this sector.(Page 7)
10. C.I.T.B. April 1967.
11. C.I.T.B. 11th August 1967.
12. Shipbuilding I.T.B December 1965.
13. June 1966 (Significant phrases have been underlined).
14. Shipbuilding I.T.B. July 1967 H.M.SO. Page 11.
15. Statistics are given in full in Appendix VII Table (a).
16. N.C.B. Students have formed $\frac{1}{3}$ to $\frac{1}{2}$ of these classes in recent years.
17. The Local Authority ruling was that at this level if class numbers fall below eight in three consecutive weeks, the class must close. This minimum is being raised to ten for the 1968/69 session.

18. "Day Release," paragraph 146.

19. A Local Government Training Board was established in November 1967. It is a voluntary scheme and therefore a trainee with some local authorities may not receive recognised training.

20. 1964/65 was the last complete set of registers available but there have been no major changes in courses since.

21. Persons responsible for training in some twenty establishments of various sizes were interviewed.

22. Page 7.

CHAPTER 8

THE INDUSTRIAL TRAINING ACT 1964 to 1968

SUMMARY OF PROGRESS

The bulk of this thesis is concerned with progress in three Industrial Training Boards. For each Board its achievements have been assessed in terms of quantity, quality and the sharing of costs. In this chapter the Shipbuilding, Construction and Engineering Boards are compared with each other and with some other established boards in order to create an overall impression of the changes which have occured during the four years since the Act. In the concluding chapter these achievements are assessed in terms of the criteria suggested in Chapter One.

In December 1968[1] there were 26 Industrial Training Boards with a total labour force of over 15 millions. They now cover some 85% of all those in industry and commerce to whom the Act applies. Of the 26 boards five have been in operation for four years, nine for three years, five for two years, three for one year, and the remaining five have not yet taken a levy. This thesis has therefore concentrated on the boards which have been longest established, since their results are available, and since their radically different approaches to the problems of industrial training will influence the policies of later boards. The five boards established during 1968 have 4,500,000 employees and there

are a further 3 millions not yet served by a board. This is therefore a useful stage at which to review progress in order to plan for the future.

QUANTITY OF TRAINING

Training may be undertaken within industry, either on or off the job, or in Colleges of Further Education maintained by Local Education Authorities. The Colleges of Further Education provide a range of courses which includes both skill training and the associated theory. Numbers on these courses are returned by each college in November[2] and statistics both locally and nationally are therefore easily obtainable. The totals are published annually as "Statistics of Education" by the Department of Education and Science. Training within industry is more difficult to assess. The Industrial Training Boards insist that a written programme is followed and that individual records are maintained. Though the numbers on internal training courses are not normally published, summaries are quoted in some of the annual reports of the training boards. The Engineering I.T.B. report[3] that 24,000 places were available in Colleges and works schools in September 1966 for first year full time training. This was an increase of 10,000 in one year. The Construction I.T.B. approved 162 internal schemes in the first full year and 66 in the second year.[4]

The Government Training Centres also offer places for skill training, though they have now discontinued full time basic courses.

They have places for about 12,000 trainees a year with an emphasis on retraining for redundant workers and special training for the disabled.

The Industrial Training Boards themselves have also established training centres. The Construction I.T.B. and the Shipbuilding I.T.B. have done this for specialist trades. The Engineering I.T.B. have equipped training centres for group training schemes. In 1965/66 there were 533 places in 7 centres and a further 1,028 places in 13 centres were being established in September 1967.[5]

Though the total numbers involved in off the job training are difficult to obtain directly, a reasonable guide is given by the statistics for release to colleges of Further Education. The Ministry of Labour (D.E.P.) advised that training should include release to a further education college in order to obtain an industrial training grant. Release may be one day a week over a year, or for a "block" of days. These are both classified as "day release". Release for longer periods may also be granted; the first year full time basic training courses, and full time and sandwich degree courses are examples of the latter.

Block and day release numbers have increased steadily since 1945.[6] In 1951 there were 261,000 students on release. The total increased to 378,000 in 1956, 494,000 in 1961, 574,000 in 1964, 625,000 in 1966 and 640,000 in 1967. Though the first Industrial

Training Boards were established in 1964, their grants were not available at the beginning of the 1964-5 Session. The increase in release between 1964-5 and 1967-8 is therefore in part the direct result of their encouragement. In those industries not yet served by a board the publicity accorded to the Act should also have brought about a greater realisation of the importance of training. The "Statistics of Education" give a very detailed information about the 15 to 17 age group,[7] for which the Henniker Heaton Committee set a numerical target in 1964;

"We recommend that for the year 1969/70, a national target should be set of at least an additional 250,000 boys and girls obtaining release from their employment for further education. Our aim involves an average increase of the order of 50,000 a year during the next five years. It results in roughly doubling the present numbers."[8]

NUMBERS OF STUDENTS AGED 15 TO 17 ON DAY RELEASE COURSES (For details see Appendix VIII)

	NUMBERS RELEASED	TARGET
1963 - 4	268,6000	-
1964 - 5	275,600	-
1965 - 6	269,000	320,000
1966 - 7	265,278	370,000
1967 - 8	260,800	420,000
1968 - 9	-	470,000
1969 - 70	-	520,000

The numbers obtaining Day Release have in fact decreased steadily from 1964-5. There are three factors which help to explain this. The number in the age group has fallen slightly, a higher proportion is remaining in full time education and a small number are attending full time basic courses on release. The Central Training Council in its 1967-8 Annual Report discusses this problem at some length.[9] The Council points out that though the numbers in the age group who obtain Day Release have decreased the proportion has increased, "In fact, the proportion of young workers being released has risen from 19% in 1964/5 to 23.4% in 1967/8 (31% to 36.2% in the case of boys alone)." An increase from 19% to 23.4% though considerable is less than had been hoped for. If the release statistics for the present decade are listed;[10]

	Boys	Girls	
1960/61	25.7	6.3	(% of age group)
1961/2	30.4	7.6	
1962/3	30.3	7.4	
1963/4	30.2	7.1	
1964/5	31.0	7.3	
1965/6	32.6	7.7	
1966/7	34.3	8.5	
1967/8	36.3	9.2	

the increase of 5.3% for boys since the introduction of the Act is little more than the increase of 4.7% in the single year 1960/61 to 1961/62. There are therefore no grounds for complacency. The Central Training Council has, "received a number of expressions of concern that there has not been faster growth in day release for

young people in occupations requiring a substantial period of training."[11] The Council "share this concern".

The overall slow rate of growth is the result of failure of some sectors of industry to respond to the need for training. These are masked in the general statistics by those sectors in which major developments have occured.

In Engineering the proportion of boys on release increased by 2.2% in the two years before the Act and by 13.6% in the two years following it. In contrast, within the Construction industry the proportion of boys on release increased by 3.3% in the two years before the Act but decreased by 2.2% in the two years following it. The Construction Industry Training Board is now cutting its levy from 1% to 0.7% because of the accumulated funds which have not been claimed.[12]

Though some industrial groups which are not yet levied by Training Boards have shown an improvement in the proportion of release, the four groups which release the lowest proportion are all in this category;[13]

Clothing	4.5%
Leather, Leather Goods and Fur	3.8%
Retail Distribution	3.2%
Insurance, Banking and Finance	3.1%

Though it was Ministry of Labour policy to establish the early training boards in order to "have some experience with the less difficult ones," the problems of the remaining industries are not becoming less acute. The four years which have elapsed could well have been used in preliminary work by established Boards. If necessary they could have been supported by Ministry of Labour grants until they were able to quantify training needs. The clothing industry alone employs 59,271 young workers under 18 of whom only 2,675 are released. Of the 340,750 young workers in Distribution only 10,857 are released; this industry employs almost $\frac{1}{3}$rd of the labour force in the 15 - 17 age group.[14]

The statistics examined above are for employees aged 15 to 18 on day and block release. A proportion of students will, as a result of the Industrial Training Act, be taking alternative types of course. The first year full time courses established in certain industries are the most important example of this. Numbers are not given for students released to full time courses in "Statistics of Education." The College returns from which the statistics are compiled merely group together all full time courses, many of which are voluntary continuation courses from school. A useful guide is the numbers on City and Guilds courses. Though these include some voluntary full time students, the rapid increase in numbers is probably the result of an increase in those on release. In the one year between 1965/66 and 1966/67 the numbers on City and Guilds Full Time Courses rose fro

6,555 to 10,620, an increase of 4,065.[15] Over 3,000 of the additional students were on Engineering and Shipbuilding Courses. Though the increase in numbers on basic training courses at Colleges of Further Education has had some effect on the total numbers on day release, the total on full time basic courses including those not on release in probably 50,000 out of a total insured population in the age group of 1,255,293. Further the main development of full time courses has been in Engineering and Shipbuilding which also show the greatest proportionate increases in day release. The only other type of course to which students of this age group may be released are sandwich courses but again the numbers involved are insignificant.[16]

The number in the 15 to 18 age group on release has not shown a marked overall increase. In Engineering, Shipbuilding, Iron and Steel and the Supply Industries, there has been a commendable improvement from an already high standard. This has been offset by a slowing down of the development of release in other industries, some of which have been under the influence of Training Boards for the full four years. The most regrettable feature of these statistics is the decrease in the already very low proportions released, in certain industries which are not yet fully served by a Training Board.

There is also a discrepancy between the advantages received by boys compared with those received by girls. The Henniker Heaton Committee "noted with concern that, with a few important exceptions,

the proportion of girls in industry and commerce allowed day release is substantially smaller than the proportion of boys."[17] The order in which the Training Boards were established has emphasised those industries in which apprenticeship for boys is the normal form of training. Engineering, Shipbuilding, Construction and Iron and Steel are male dominated industries. Wool, Jute, and Flax is the only board of the 1964 group in which a substantial number of women receive training. If the five industries which employ more women than men are listed with the date of formation of the relevant training board the significance of the late formation of these boards is emphasised.

INDUSTRIES EMPLOYING MORE WOMEN THAN MEN JUNE 1966
(EXTRACTED FROM APPENDIX I TABLE (d)

Classification Number	Brief Title	FEMALE Employees	MALE Employees	Date of I.T.B. Appointment
22 20	Professional	1718	855	None
20	Distribution	1647	1,388	August 1968
23	Miscellaneous Services	1270	977	*
10	Textiles	423	387	1964 to 1966**
12	Clothing	408	143	NONE

* Miscellaneous Services" includes Hotels and Catering for which the board was established in November 1966.

** Wool, Jute & Flax June 1964, Carpet March 1966, Knitting Lace and Net March 1966, Cotton and Allied Textiles July 1966.

The Central Training Council and some of the training boards are aware of the resistance to the training of women which is apparent at all levels from copytypists to graduate engineers. The Engineering I.T.B. found it necessary to include the following paragraph in its May 1966 Information Paper to employees.

"WOMEN IN THE ENGINEERING INDUSTRY."

"The Board would like to make it quite clear that it considers that women and girls, who already play a large part in the engineering industry at the operator level and in the clerical and commercial field, have a contribution to make in the more highly skilled sections of the industry which by tradition mainly employ men.

It should be emphasised that in all the Board's thinking on training and in all its recommendations, no distinction is drawn between the sexes. Indeed, the Board would hope that girls will in future become more and more interested in engineering careers at all levels." This statement recognises the contribution that could be made by women in the industry. The statistics for release to the Sunderland Colleges show that the number of girls on day release is far below that of boys.

DAY RELEASE TO ALL SUNDERLAND COLLEGES 1962-3 TO 1967-68

	BOYS	GIRLS
1962-63	2,640	285
1963-64	2,629	217
1964-65	2,571	312
1965-66	2,847	338
1966-67	3,098	271
1967-68	3,156	341

Note: The Local Youth Employment Office states that numbers in the age groups are approximately equal for boys and girls.

The reluctance to release girls has been criticised in successive reports on Technical Education.

"Hundreds of thousands of these young women are not making the best use of their talents because they stopped their education when they left school."[19] (1956).

"It is impossible to escape the conclusion that the country has hardly as yet made a beginning with the continuing education of girls after they leave school."[20] (1959).

"We recommend that employers should devote practical attention to the further education needs not only of those to whom priority must be given, but of all their young employees, girls no less than

boys. This would be in the interests both of the young people and of the employers themselves."[21] (1964).

The Industrial Training Boards have done little to remedy these deficiencies. The Central Training Council does not include the training of girls in its list of problems in the 1968/9 report. Since more girls than boys under the age of 18 are in employment[22] the country cannot afford to neglect this valuable source of recruits if the purposes for which the Industrial Training Act were introduced are to be achieved.

Some emphasis has been given to the training and associated education of those under 18, but older students must also be considered. A feature of the levy and grant system is that an employer releasing more highly paid workers to courses does not now have to make a great financial sacrifice. The development of courses for Managers, Supervisors and students continuing their studies to degree level, are therefore made easier by the grants available from the Training Boards.

Comprehensive statistics for the development of release to higher level courses are not available. "Statistics of Education" does not classify students over 18 by industries. The individual training boards include some statistics in their reports but there are no statistics available for earlier years with which to make

comparisons. The total figures for sandwich courses and day release courses for students over 18 do give some indication of the general development.

NUMBER OF STUDENTS ON SANDWICH COURSES 1962-3 TO 1967-8

	15 to 17	18 to 20	21 & OVER	TOTAL
1962/3	700	5,200	3,800	9,700
1963/4	900	6,400	4,600	11,900
1964/5	1,000	7,300	5,800	14,100
1965/6	1,000	8,800	7, 400	17,200
1966/7	1,100	10,800	8,800	20,700
1967/8	1,200	12,900	10,700	24,800

(Statistics of Education 1967 Volume 3)

Sandwich course students are either industry based or college based. College based students, though they spend periods in industry, are not on release though they are included in the table above. The majority of sandwich course students are industry based and are released to colleges for periods often of six months. At the Sunderland Technical College all of the 440 sandwich course

students were on release, with the exception of a handful of overseas students. The marked increase in numbers on sandwich courses indicates that many firms are realising that there is a marked shortage of technologists. Though the rate of increase has not improved since 1964/65, the high grants available from Training Boards have at least recompensed those firms which are far sighted enough to grant release at this level.

There has been a corresponding increase in day release for older employees.

NUMBER OF STUDENTS ON DAY RELEASE COURSES 1962/3 TO 1967/8

	15 to 17	18 to 20	21 & OVER	TOTAL
1962/3	261,400	183,300	81,500	526,200
1963/4	268,600	189,100	83,400	541,100
1964/5	275,600	205,200	89,900	570,600
1965/6	269,000	230,300	102,800	602,000
1966/7	265,300	264,200	113,600	625,000
1967/8	260,800	249,400	129,800	640,000

(Statistics of Education 1967 Volume 3).

The surprising lack of development in day release for the 15 to 17 age group has already been mentioned. There is in contrast a welcome

expansion in the granting of day release to older students. In 1962/63 students aged 18 and over, formed 50% of the total on day release. In 1967/68 they formed 59% of the total. No breakdown by industries is available but the higher grants obtained for the release of more highly paid workers must be a significant factor. Before training board grants were available the release of a young apprentice was cheap in terms of labour costs, whereas release for workers over 18, and especially for those over 21, was a considerable sacrifice. The grants from most boards cover the whole salary of an employee on release and therefore encourage the development of more advanced courses.

The training of Training Officers, Instructors and Managers has also been stimulated by the grant system and by the facilities offered by the Ministry of Labour (D.E.P.) and the various boards. The Central Training Council reported that 30 new sandwich courses for training officers have been established and that the capacity of the Ministry of Labour Instructor Training Centres had been doubled to 2,500 a year[23]. They also recorded that in the Wool, Jute and Flax Board alone, 1,000 men and women had completed instructor training courses organised by the Board. Management courses have also been well supported. The Cotton and Allied Textiles I.T.B. is to publish Management Training Recommendations before any others in order to emphasise the importance of training at the top.[24] Almost 3,000 managers attended courses approved by the Engineering Industry Training Board in 1966/67.[25] There has

also been a development of short, grant aided, courses. The Training Manager of one large Construction Firm stated that during 1967 over 1,000 of his employees had attended short courses ranging from safety training to stock control.[26] It is in the training of Training Officers that the Industrial Training Act has had its greatest impact. The Central Training Council published the following statistics in its 1968-9 Annual Report (p.9.)

ATTENDANCE AT INTRODUCTORY COURSES FOR TRAINING OFFICERS			
	1965/66	1966/67	1967/68
Courses	31	61	90
Students	367	810	1249

This achievement is significant in itself but the availability of skilled training officers should result in more training within their firms and in a great improvement in quality.

There has been a significant increase in the quantity of Industrial Training since 1964. There are still sectors in which little has been done, notably in commercial and clerical training and indeed in any training for girls. In the long term all entrants male or female to any industry have a right to be efficiently trained for the tasks to which they are suited. To some extent though the overall standard of training has improved, the Industrial Training Act has further increased the discrepancies between males and females and between industrial groups. This is not embodied in the Act itself

but is a resultant of existing training practices, the order in which the boards were established, and short term training priorities. The Central Training Council has a responsibility through the Department of Employment and Productivity to ensure that the outstanding achievements in some sectors become the norm for all sectors of all industries.

QUALITY OF TRAINING

The improvements in the quality of training brought about by the Industrial Training Act are difficult to define. The publicity given to training, the grant system, the encouragement of training formanagers, supervisors and training officers, must enhance the training environment. The individual training boards are considering, at length, recommendations on training and associated education. In many industries no syllabus had previously been devised, and in still less, was the training based on a thorough analysis of the necessary skills. The first groups of boards have taken four years to publish most of their recommendations. The Engineering Training Board published its very detailed course for first year craftsmen early in 1966 but it has not yet completed schemes for higher levels. The Shipbuilding I.T.B. published a range of schemes in late 1967. The Construction industry had not published any detailed plan, except in collaboration with other boards, by the beginning of 1968. These industries already had a

tradition of apprenticeship which normally included day release to Technical Colleges. The problems of some later boards are even greater in that apprenticeship and day release are less common. It may well be another decade before training recommendations are published for all occupations covered by the Act.

The Industrial Training Boards have the power to approve courses for which they give grants. They make direct recommendations on industrial training for all occupations within their scope. They co-operate with examining bodies and the technical colleges in organising syllabi for the educational content of such courses. In this they hold an intermediary position in the difficult task of integrating training and education The Central Training Council points out that the Industrial Training Act, "Recognises the division of responsibility, but does not create it. Nonetheless, there is a danger that, in clarifying the position, the Act may tend to sharpen the distinction between education and training just at a time when that distinction is becoming less and less meaningful."[27] The Training Boards must make every effort to ensure that the firms, and particularly the immediate apprentice supervisors, do not distinguish between "useful" training in the firm's workshop and "airy-fairy" theory at the college.

The training boards also improve the quality of training by improving its organisation. Grants for separate training workshops, for the training of supervisors and training officers are examples of this. The Ministry of Labour stated that there are over 200 group training schemes, 500 training officers employed by the Boards, and a larger number in individual firms.[28] The detailed records of each trainee's experience improve quality by ensuring that training is planned and carried out. The training of management in the recognition and use of skills is a further factor. The Industrial Training Boards have great potential powers to improve the quality of training. The Department of Employment and Productivity must ensure that these are used to the full.

The effects of the Industrial Training Act on the Sunderland Colleges have been examined in previous chapters. Whereas statistics for numbers on courses are easily obtainable, data on the quality of students is not available. The Department of Education and Science admits that, "We know very little about the numbers entering the system, where they come from and their entry qualifications; about wastage from courses and extent of repeating years of the course; and about transfers from one type of course to another and the extent of which transfers modify conclusions about wastage."[29] It is possible to study pass lists for the various examinations taken by students at the Sunderland

Colleges and then to relate these to the courses from which students were entered by checking through individual student's record cards. This is not undertaken at any of the colleges. Even when these pass rates are obtained they are not a guide to "quality of training."[30] Most technical college examinations have a fixed pass rate so that improvements in the quality of the whole body of students are not reflected in an increased pass rate. A college which increases its pass rate does so at the expense of other colleges.

Though it is not possible to quantify the improvement in the quality of training at the Sunderland Colleges, the Industrial Training Act has had some immediate results. The changes in organisation within firms, which provide for planned training, for the appointment of training officers, for management and supervisory training must have a cumulative effect.

Improvements in the quality of training depend upon selection of trainees, provision of appropriate courses, and testing of results. These are all long term projects which are being undertaken. The Central Training Council is supporting seventeen major research projects[31] on general topics and each board has grants available for research specific to the industry. At the present stage the longer established boards have produced training schedules for most categories. Selection and testing is still being investigated. Tangible improvements in the quality of

training engendered by the Act are the training officers, supervisors and fully equipped workshops which are apparent in those firms which are taking full advantage of the grants available. The quality of trainees is not yet measurable. The legacy of unplanned and uncoordinated training will not be easily overcome.

SHARING THE COSTS OF TRAINING

The third aim of the Industrial Training Act, to share the costs of training more equitably between firms, is less relevant to this thesis than the aims of improving the quantity and quality of training. A fairer sharing of costs will have an effect on training as a whole, in that the firms who in the past have "poached" trained employees are now made to realise the importance of training, and the firms with a good reputation are recompensed for their investment. The total levy in 1967/8 was over £120. millions and may well double when the full scheme is in operation. D.A.R. Forrester of the University of Strathclyde estimated that the total training costs are currently £300 millions a year.[32]

The operation of the levy and grant scheme does not directly affect the Further Education Colleges. Their only part in it is to certify attendances and examination results. Most Boards specify a minimum number of attendances on a course for which they are allowing a grant. This makes attendance more stable, discour -

ages the employer from withdrawing students, and discourages the students from absenteeism. Grants are now payable to colleges for any workshop training. This transfers the cost from central and local funds to the firms via the Levy and Grant system and may make more money available for the remaining educational sector.

The Levy and Grant system is a compromise between compulsory and voluntary release. The problem is that it does not guarantee satisfactory training and education for all new entrants. A possible step would be to prevent employers from undertaking "training" unless it complies with the relevant I.T.B. regulations. Young entrants would then be taken by firms willing to train them in return for a grant. The firms not undertaking training would pay the levy and in return would be able to recruit skilled personnel. If this system was operated in conjunction with manpower forecasting, a satisfactory flow of well trained staff would be available. Where necessary the Boards could use their power to undertake training, including the indenture of apprentices, in sectors where a future need is forecast. In Sunderland, with an unemployment figure of 6%, this would be particularly valuable. The report of the Sunderland Youth Employment Committee states that in September, 1967, there were 568 unemployed of whom 234 were boys under 18. Others were not suitably employed. "It has been noticeable that some of them

have accepted the first job that came their way - and these were often below their capacity."[33] Training undertaken by an Industrial Training Board in a growth sector would both benefit the Industry and help alleviate a severe social problem.

The Central Training Council includes a review of levy and grant schemes in the 1968/1969 annual report.[34] The aims of the boards through the levy and grant schemes are described. "They want schemes to encourage desired developments in training; they want to deal, and to be seen to deal, fairly between one employer and another; and they want their schemes to be as efficient and economical and readily understood as the attainment of the first two objectives will allow." There are two basic problems. First the total levy necessary must be assessed, secondly this sum must be distributed as equitably as possible. The global sum need not reflect the total cost of training. Only the Engineering I.T.B. with a levy of 2.5% have attempted to do this. There is a danger however that the levy will be set so low that it can be ignored. The Central Training Council warns against this "Goodwill.....will be dearly bought if it depends on a lower level of levy than a board needs to secure the effective implementation of its policies."[35] The problem of grants is more involved. A scheme which allows for all variations becomes too complex to be understood and too expensive to operate. Most boards have paid grants for training actually done and approved. The

Engineering I.T.B. relate training done to the need for skill in a particular firm. The Iron and Steel Board are proposing a "score" system which would achieve similar results. Some boards have adjusted the levy for certain sectors of their industry in order to secure equity.

The levy and grant scheme is a vital part of the Industrial Training Act. At the lowest level the demand for money ensures that each establishment is aware of the existence of a training board. Poaching of skilled labour is no longer a problem.. The levy must be high enough to encourage training and the Department of Employment and Productivity should use its powers to ensure that this is achieved. An important consideration is that the levy and grant operation should not consume so much of the time, finances and interest of Boards and employers that the purposes for which they are made are subordinated.

NOTES

1. Statistics in this paragraph from C.T.C. "Annual Report 1968-9," page 3 and pages 31 to 34.
2. See Appendix X of this thesis.
3. "E.I.T.B. Annual Report 1966-67," page 4.
4. "C.I.T.B. Annual Report 1966-67," page 19.
5. "E.I.T.B. Annual Report 1966-67," page 7.
6. National Statistics Appendix VII Sunderland Statistics Appendix I and Appendix VIII.
7. See Appendix X.
8. "Day Release." Recommendation No. 1.
9. Paragraph 76.
10. Source - 'Statistics of Education," H.M.S.O.
11. Paragraph 77, (C.T.C. Annual Report 1967-68.)
12. See Chapters 5 and 9.
13. See Appendix VIII Tables (b) and (c).
14. Idem.
15. "Statistics of Education 1965-66," Table 27 and corresponding Table for 1966-67.
16. Only 1,200 were released to sandwich courses in 1967-68 (stats. of Education.)
17. "Day Release," paragraph 152.
18. As the data for Sunderland factories and the national statistics show (see Chapter 6) a large number of women are employed in Engineering but except for clerical staff they are almost entirely engaged as operatives.
19. "Technical Education." p. 20.
20. "15 to 18", page 340.

NOTES

(continued)

21. 'Day Release", page 10.

22. In 1967/68 the insured working population under 18 was Boys 567, 591, Girls 589, 554 (Statistics of Education).

23. C.T.C. "Annual Report June 1967".

3 Chairman of the Board B.B.C. interview 21st March 1968.

25. E.I.T.B. 1967/68 Report.

26. Speaking on B.B.C. programme (see note 24 above.)

27. C.T.C. "Memorandum No. 1. Industrial Training and Further Education".

28. Minister of Labour writing in "Times Educational Supplement" March 1st. 1968.

29. Covering letter to Technical Colleges sent with D.E.S. forms asking for information for a new 1 in 30 sample of students October, 1967.

30. A study of the validity of Technical College Examinations is made in Venables 1967.

31. 1968/69 Annual Report.

32. "Technical Education and Industrial Training" February 1967.

33. Foreword to the "Annual Report of the Youth Employment Service in Sunderland for 1966/67."

34. Paragraphs 45 to 55.

35. Ibid. paragraph 49.

CHAPTER NINE

ASSESSMENT

The achievements of the training boards have been critically assessed throughout in terms of quantity, quality and sharing of costs. Before examining the success of the Act as a whole, in the setting of the development of Industrial Training, and the problems and criteria set out in chapter one, a report on the administration of the Act is relevant. There has been no published independent study of the Act as a whole, though a number of articles have appeared in journals and in the press, on specific items of policy of individual boards. A select committee of the House of Commons was however appointed to review "Manpower Training for Industry." Its report became available in July 1967.[1] The Ministry of Labour made comments on this report in December 1967.[2] Further discussion is included in the Central Training Council's 1968-69 Annual Report.[3] The Select Committee called witnesses from industry, education and the two government departments. Some of their comments have been quoted previously. The Committee made seven recommendations some of which are relevant to the present discussion. The full list of recommendations appears as Appendix XI (a) of this thesis.

The Select Committee in general suggested that the Ministry of Labour should become directly involved in the policies of the

boards. They recommended that the Ministry of Labour should;

(a) direct boards to recruit more training staff and to carry out inspections; (no. 1)

(b) refuse to allow boards to take other than a nominal levy until a full survey of training needs had been undertaken (no. 2)

(c) instruct boards to make grants for management training and the training of training officers (nos. 5 & 6)

(d) establish a national centre for industrial training (no. 6a.)

The Ministry of Labour and later the Central Training Council pointed out that any of these four proposals is a contradiction of the fundamental basis of the Act which is in an industry by industry approach. "The boards will not be able to give their industries the service they ought to have unless firms are confident that training is being run by organisations which are an integral part of industry itself."[4] The process is one of "Consulta tion" not one of "direction" or "instruction". The successes of this policy between 1964 and 1968 have been apparent throughout this thesis. The variety in approach is a strength of the Act. There may however be a place for minimum standards to be ensured by the use of the powers of approval vested in the Department of Employment and Productivity. The laxity of some boards in adopting the proposals of the Central Training Council on Commercial and Clerical training is an instance in which more pressure was necessary. The Shipbuilding I.T.B. should not have been

allowed to pay only half as much for clerical as for other trainees. The opposition by some farmers to the levy from the Agriculture, Horticulture and Forestry Boards, and lack of interest by employers in Construction Shipbuilding and Furniture and Timber, have led to proposals for the reduction of levies. A levy reduction should only be sanctioned when manpower requirements are clearly falling. More publicity should be given to discussions between the Department and the Boards, This would enable outsiders to appreciate the problems involved and to estimate the efficiency of the present system.

The Select Committee recommended a review of the function of the Central Training Council (no. 4). This is now in progress. Some of the problems outlined above could be reduced by granting powers to the Council through the Department of Employment and Productivity to ensure certain standards. Where the Central Training Council has produced detailed training schemes for occupations which are common to most boards these should be adopted by the boards with any minor modifications necessary. Commercial and Clerical training, safety training and the training of managers and training supervisors are fields in which the Council should have more control. The training of managers and of training officers are two special recommendations of the Select Committee (nos. 5 & 6) The Central Training Council should also have more power to ensure that each board had adequate staff for

advice and inspection at shop floor level. Though the boards should have some rights to "decide individually in the light of the needs of their own industry" a very low ratio of local training staff to firms must reduce the effectiveness of the Board's policies.

The three remaining recommendations of the Select Committee are concerned with;

(a) Restriction of the initial levy. (no.2.)

(b) Establishement of a board for Printing and Publishing (no.3

(c) Manpower research. (no. 7)

The first two are linked in that they relate to the problem of the order and rate at which boards have been established. This problem has been mentioned already. The Select Committee suggested that only a levy to cover expenses should be taken until " a comprehensive study of the long term needs of the industry" had been made. This is considered "unrealistic" by the Central Training Council because of the delay involved before a board takes effect. A possible solution to this problem would have been to establish steering committees supported by Ministry grants as soon as possible after 1964 for each prospective Board. These committees could have taken the long term view suggested by the Select Committee and facilitated both the setting up of the boards and their early planning. Some consultation no doubt exists

before a Board is established but these discussions are not publicised. The demand for a Printing and Publishing Board would have been met in part by the establishment of a steering committee. The task of the Distribution Training Board in an industry with fragmented training schemes, 500,000 employees and 2,250[5] employers, was not made less by the four year delay in its establishment. There is still no board for the clothing industry, for commerce, or for some service industries.

The final recommendation of the Select Committee on manpower research was accepted by the Ministry. The Manpower Research Unit is undertaking this vital and complex task. It has published recommendations to individual firms and is proceeding with research into long term relative trends in industry as a whole and into the manpower structure of individual sectors of industry. The success of industrial training depends upon this research, since the employer and the employee must be assured of a return from their investment in training.

In October 1968 the Central Training Council issued a document[6] restating basic policies on training and pointing out the relevance of the changes necessary to industrial negotiations. Eight principles are formulated;

(1) Training systems to be available to all capable of benefiting from them;

(2) Training to be based on job analysis - broad based for initial training - specific at later stages;

(3) Length of training to be the length needed considering the task and the individual trainee;

(4) All young trainees to receive further education necessary to "complement and re-inforce their industrial training.";

(5) Training of young people and of adults to be related in terms of standards required;

(6) Retraining and education to be available whenever necessary to cope with changes in technology and industrial structure;

(7) Workers to be encouraged to take courses which will improve their status;

(8) Tests of competence to be applied at all stages and therefore jobs to be available only to those proved competent.

The eight principles summarised above and the spirit of the statement as a whole accord with the complete re-structuring of training called for by the writers and associations whose views were quoted in the first chapter of this thesis. "Such training schemes will call for changes also in periods of apprenticeship traditional destinctions between occupations, established wage and career structures and many other related matters which are the direct concern of the established negotiating and consultative bodies of industry."[7] Changes on this scale must involve some sacrifice of traditional practices and will therefore invoke opposition from groups with vested interests. There can be few who would disagree in principle with the fundamental policy. The British Association for Commercial and Industrial Education has put forward these ideas for some years. Entry to the European Common Market would necessitate the changes proposed. The question which this thesis

has attempted to answer is whether the developments since 1964 at local and national level suggest that the machinery established by the Industrial Training Act is sufficient to achieve the proposals of the Central Training Council and of the criteria for success suggested in Chapter One. As stated there, in an ideal situation each worker, would be at his maximum productive task in a congenial situation. He would have been tested, selected for a course of training, released for education courses, tested for competence when trained and appointed to a post allowing full scope for his attainment. If all workers, including supervisors and managers, are employed at this level productivity would be significantly increased. It was suggested that assessment of the degree to which this ideal has been achieved during the first four years of operation could be made in terms of industry as a whole, a single industry, an employer and a trainee.

British Industry is not yet fully served by Training Boards, The setting up of steering committees as suggested in the preceding chapter might have helped to ease this problem. Because of the industry by industry approach there is a divergence of opinion on the scale of training and supervision necessary. Although this variety is an essential part of the thinking behind the Act no board should be allowed to fall short of its aims. A strengthening of the Central Training Council as advocated above may be the solution to this problem.

Within each industry the individual training board is preferable to a centralised training system. The employers and employees in an industry should have the confidence that the board's decisions are the result of direct experience in that particular industry. Publicity has been given to factions which oppose being charged for training. The problems of the Agriculture Board with certain farmers are an example of this. When policy has been agreed by a board consisting of employers, employees and educational representatives and then sanctioned after scrutiny by the Department of Employment and Productivity each firm must bear its share of the cost. The Act allows legal proceedings to be taken against those who refuse to bear a share. That these measures are rare is a measure of the success of the Act. The Board must serve the industry by, with the help of manpower research units, forecasting future developments and appropriate training needs. This machinery is operating, though at this stage no direct evidence of results can be expected.

Each employer is informed by the Board of training requirements for the jobs undertaken by his employees. He must pay a levy but he can choose whether to receive back a grant for the training he undertakes, or to employ labour trained by another firm at his expenses. The board must ensure that the levy is sufficiently high to recompense fully the firms which undertake satisfactory training. The Department should not approve levy orders which do

not conform to this standard. Any proposed reduction of levy should be allowed only in exceptional circumstances. Some boards have a low levy rate partly because of lack of interest shown by employers.[8] This could in part be remedied by a system of regular visiting of each employer by the board's staff; this would fulfill the dual function of ensuring that the employer was fully aware of his duties and passing back to the board shop floor problems and suggestions. Some attention should be given to those boards in which the local staff is not sufficient to serve this dual purpose.[9]

The trainee is promised a new deal by the Act. In some sectors of some industries he is benefiting from it. The Act unfortunately does not specifically guarantee a satisfactory training for each employee. It is a training act designed to provide manpower not an education act where the welfare of the individual is paramount. It is still possible for an employer to take on a "trainee" or even an apprentice and to use him as cheap labour. In time this problem will become less important in that more industries will be served by training boards and they in turn will have produced training schedules, with suitable tests of competence. A trainee should not be recognised as qualified unless he is successful in these tests. It would be possible to legislate to prevent employers from taking on trainees unless they undertake to provide training and associated education in

accordance with the board's wishes. This may be avoided if qualifications are based on competence and not on time serving, and if those entering employment are fully informed of which firms in their area provide recognised training. The Department of Employment and Productivity is responsiblefor both of these services.

The Industrial Training Act provides a comprehensive and flexible instrument for improving training and associated education. The evidence at both local and national levels suggests that in some sectors a very efficient system is now operating. After four years, progress is not uniform and there are still deficiencies within certain industries and within certain sectors of all industries. The apprentice welder is assured of training and education in almost any industry; the girl trainee shorthand typist is denied release in almost all industries.

In order fully to achieve its aims each party must cooperate. The Department of Employment and Productivity through the Central Training Council suggests criteria and has some powers to ensure that training board schemes are satisfactory. In cooperation with the Department of Education and Science it directly informs employers and Technical Colleges and school leavers of the general aims. The Training Board has a duty to ensure that its proposals are adequate to ensure a sufficient number of competent workmen in each sector of its industry. It must adapt the suggestions of the Central Training Council and make recommendations

to its employers. The employer should provide satisfactory training and be recompensed for doing so. The trainee should be given every opportunity to reach his full capacity. The Further Education service must provide appropriate courses to ensure this.

The Act is deliberately permissive in tone. The Department of Employment and Productivity perhaps through a strengthened Central Training Council must ensure that the best training now being given as a result of the Act is available to all regardless of age, sex, or industry. At local level a suggestion of the Henniker Heaton Committee could be considered. "The spearhead of voluntary development must be at local level..... a local target related on the one hand to local circumstances and on the other to the national target..... should be set."[9] An area committee with representatives from each industry and from the technical colleges, presided over by a local officer of the Department of Employment and Productivity would provide a forum for dissemination of information and for discussion of problems and proposals. The present system has a strong vertical structure. A strengthened Central Training Council could unite the effort at national level. Local Industrial Training Committees could unite the work on the shop floor.

NOTES

1. "Ninth Report from the Estimates Committee Session 1966/67."
2. "Second Special Report from the Estimates Committee 1967/68."
3. Op. cit. paragraphs 9 to 11.
4. Ibid paragraph 10.
5. Statistics from C.TC. Annual Report Appendix III.
6. "Training for Skill - The Time for Change." This is reproduced as Appendix XI b. of this thesis.
7. "Training for Skill - The Time for Change," paragraph 6
8. The chapters on Construction and Engineering point out the lack of interest shown by some employers in Sunderland. The Shipbuilding I.T.B. Grant and Levy chart (Appendix II a) illustrates the discrepancies between firms.
9. It has been suggested in previous chapters that a reduction of levy is to some extent an admission of failure. Money not claimed in grant could well be spent in improving liaison at local level by providing shop floor advisory and inspection staff.

For 1968/69 the Construction and Shipbuilding I.T.B.'s propose reduced levies (Construction from 1.0% to 0.7%). (Shipbuilding from 1.55% to 1.1%). The Furniture I.T.B. took no levy in 1966/67. The Agriculture, Horticulture and Forestry I.T.B. reduced its proposed levy from £6/10/- to £3. per employee because of opposition from employers.

LIST OF APPENDICES

APPENDIX VI - Sunderland Engineering Courses

TABLE (a) Release to each course by student numbers 1962-3 to 1966-67.

(b) Classification of numbers on release by size of firm.

(c) Example of questionnaire on training.

(d) Employment structure and release in sample firms.

APPENDIX VII - Sunderland - Monkwearmouth College Courses

TABLE (a) Numbers on vocational Business Studies courses 1962-3 to 1967-8.

(b) Student numbers on release to Business Studies Courses by Standard Industrial Groups 1967-8.

APPENDIX VIII - Great Britain - Release Courses

TABLE (a) Student numbers by period of Course 1951, 1956, and 1961 to 1966.

(b) Students aged 15-17 on release shown by Standard Industrial Groups 1962-3 to 1966-7.

(c) Changes in the percentages on release by Industrial Training Board Groups 1962-3 to 1964-5 compared with 1964-5 to 1966-7.

APPENDIX IX - Sunderland -Release and Employment

TABLE (a) Total students by Standard Industrial Groups 1961-2 1964-5, 1967-8.

(b) Total of employees by Standard Industrial Groups June 1961, 1964, 1966.

(c) Placement of school leavers.

(d) School leavers and trainees.

APPENDIX X

Note on sources for Statistical Tables

APPENDIX XI

(a) Recommendations of Estimates Committee on Manpower Training for Industry Session 1966-7

(b) Training for Skill - The Time for Change, (Central Training Council September 1968.)

APPENDIX I TABLE (a). SUNDERLAND.

TOTAL STUDENTS BY TYPE OF COURSE AT THE SUNDERLAND TECHNICAL COLLEGES. 1946 - 7 TO 1967-8.

SESSION	FULL TIME	SANDWICH	DAY RELEASE	OTHER PART TIME DAY	EVENING
1946-7	242		598		1485
1947-8	294		611	Until	1338
1948-9	340		458	1957-8	1768
1949-50	388		511	Day students	1769
1950-51	466		710	not on	1889
1951-2	588		687	release are	2474
1952-3	605		960	not disting-	2427
1953-4	686		1022	uished from	3538
1954-5	786		1286	those on	3580
1955-6	779		1217	release.	4094
1956-7	869		1405		4281
1957-8	952		1279	158	4418
1958-9	925	138	1366	181	3957
1959-60	1074	130	1894	243	3556
1960-61	1181	150	2144	202	3460
1961-2	1254	190	2586	232	4054
1962-3	1433	260	2687	254	4280
1963-4	1558	315	2881	197	3582
1964-5	1524	334	2922	122	3462
1965-6	1696	385	3334	89	3232
1966-7	1753	440	3395	91	2922
1967-8	1821	513	3497	148	2639

APPENDIX I TABLE (b) SUNDERLAND.

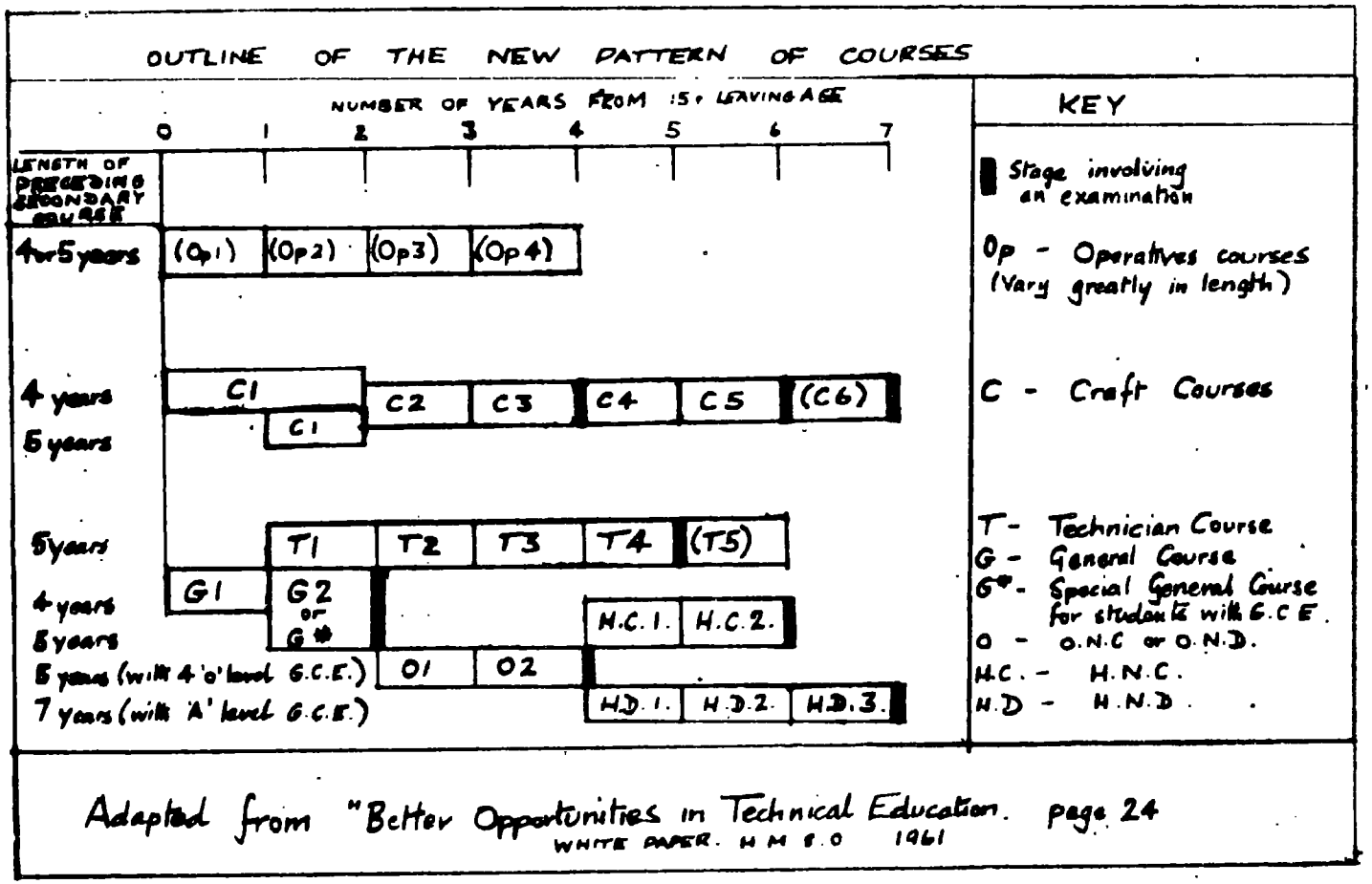
TOTAL STUDENTS BY TYPES OF COURSE FOR EACH SUNDERLAND COLLEGE 1963-4 TO 1967-8.

	1963-4	1964-5	1965-6	1966-7	1967-8
FULL TIME					
T.C.	544	602	624	626	729
C.A.	296	224	213	161	177
W.P.	128	150	283	327	220
M.	590	548	576	639	695
TOTAL	1558	1524	1696	1753	1821
SANDWICH					
T.C.	315	334	385	440	513
DAY RELEASE					
T.C.	488	328	297	263	300
C.A.	173	165	125	26	17
W.P.	1728	1742	1967	2363	2571
M.	492	687	945	743	809
TOTAL	2881	2922	3334	3395	3497
OTHER PART TIME DAY					
T.C.	5	3	8		1
C.A.	150	86	54	63	62
W.P.	22	9	3	8	5
M.	20	24	24	20	80
TOTAL	197	122	89	91	148
EVENING					
T.C.	686	524	462	269	236
C.A.	299	139	268	204	247
W.P.	492	477	318	344	240
M.	2105	2322	2184	2105	1916
TOTAL	3582	3482	3232	2922	2639

1. Abbrevations used. T.C. Technical College. C.A. College of Art. W.P. West Park. M. Monkwearmouth.

Sunderland Polytechnic May, 1968.

APPENDIX I TABLE C. PATTERN OF FURTHER EDUCATION COURSES.



Adapted from "Better Opportunities in Technical Education. page 24
WHITE PAPER. H M S O 1961

APPENDIX I TABLE (d)

TOTAL EMPLOYEES BY INDUSTRIAL GROUPS: JUNE 1966

UNITED KINGDOM, NORTH REGION, SUNDERLAND AREA

	UNITED KINGDOM (THOUSANDS)			NORTH REGION (THOUSANDS)			(SUNDERLAND (ACTUAL)		
GROUP*	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
1	395	82	477	22	3	25	93	19	112
2	557	23	580	103	3	106	5097	110	5207
3	483	358	841	20	14	34	1301	681	1982
4	379	148	527	46	9	55	0288	101	389
5	543	76	619	53	4	57	1255	84	1339
6	1693	644	2337	93	33	126	9319	4867	14186
7	202	12	214	41	2	43	9808	413	10226
8	745	116	861	10	1	11	829	49	878
9	391	205	596	10	4	14	820	175	995
10	387	423	810	11	10	21	211	519	730
11	34	26	60	1	1	2	1	0	1
12	143	408	551	6	27	33	354	2741	3095
13	272	80	352	14	3	17	2302	963	3265
14	236	60	296	11	3	14	1027	183	1210
15	424	224	648	11	7	18	1339	621	1960
16	207	135	342	9	5	14	121	54	175
17	1631	94	1725	107	4	111	4953	218	5171
18	376	55	431	20	3	23	1263	258	1521
19	1361	267	1628	69	13	82	3375	448	3823
20	1388	1647	3035	63	99	162	4653	10121	14774
21	349	299	648	11	10	21	590	928	1118
22	855	1718	2573	40	94	134	2562	6280	8842
23	977	1270	2247	44	67	111	3304	4401	7705
24	969	414	1383	52	24	76	1692	412	2104
	14,998	8784	23781	863	443	1306	56852	34435	91287

Statistics for United Kingdom and North Region from "Abstract of Regional Statistics" HM.S.O. Aug. 1968. Statistics for Sunderland Area from Employment Exchange Returns for Sunderland, Pallion and Southwick.

Groups of the Standard Industrial Classification H.M.S.O. 1958.

APPENDIX II TABLE A. LEVY/GRANT RELATIONSHIP FOR ESTABLISHMENTS RECEIVING GRANT (Shipbuilding I.T.B. March 1967)

LEVY \ GRANT	Up to 10	11 to 25	26 to 50	51 to 100	101 to 250	251 to 500	501 to 750	751 to 1000	1001 to 2000	2001 to 3000	3001 to 5000	5001 to 10000	10001 to 15000	15001 to 25000	25001 and over	TOTALS
25,001 and over															2	2
15,001 to 25,000														1*	2	3
10,001 to 15,000													1*	1	4	6
5,001 to 10,000									1	3	2	2	6*	1	1	16
3,001 to 5,000					1		2	1	1	4	2	2*	2			15
2,001 to 3,000						2	5	5	6	1*						19
1,001 to 2,000				2		4	6	2	4	9*	1	1	1			30
751 to 1,000	a				1		5		2*	1						9
501 to 750	b				2		4	6	4*	2						18
251 to 500	c		1		3		7	17	13*	5	2	1				50
101 to 250	d	2	1		9		20	25	10	1						68
51 to 100	e		1		6		13*	21	3							44
26 to 50	f	2	3		12*		10	6	1							34
11 to 25	g		2*		15		16	5								38
Up to 10	h	*	2		6											8
		4	10		53		69	83	48	17	18	24	6	5	15	4	2	2	360

a' b' c' d' e' f' g' h'

i j k l m

APPENDIX III TABLE (a) SUNDERLAND - SHIPBUILDING.
RELEASE TO COURSES AT THE SUNDERLAND TECHNICAL COLLEGES SHOWN BY STUDENT NUMBERS AT NOVEMBER 30th.

		1962-3	1963-4	1964-5	1965-6	1966-7
1. CRAFT COURSES						
a) Full Time Basic						
ELECTRICIANS		-	-	-	5	8
Joiners		-	-	-	13	14
Fitters		-	-	-	16	16
Plumbers		-	-	-	17	17
Steel Workers		-	-	-	110	106
b) Day Release						
Practical Shipbuilding	1	40	32	20	14	-
	2	33	23	16	9	38
	3	15	14	23	16	8
	4	29	12	11	14	14
Steelwork	2	-	-	-	-	60
2. Technician Courses						
a) Day Release						
Shipbuilding Technicians	1	-	10	2	5	-
	2	-	11	15	13	26
	3	-	0	0	8	9
	4	-	0	0	0	7
b) Block Release						
Shipbuilding Technicians	2	-	-	-	-	19
3. O.N.C.						
a) Day Release						
Naval Architecture	1	10	20	26	(24)	(20)
	2	12	22	16	17	8
	3	16	11	12	14	14
4. DEGREE LEVEL						
a) Sandwich Courses						
Naval Arch. Diploma	1	27	27	32	30	41
	2	10	16	18	26	20
	3	14	9	16	14	16
Post Diploma Courses	1	5	4	0	12	11

APPENDIX IV TABLE (a) SUNDERLAND - BUILDING

RELEASE TO COURSES AT THE SUNDERLAND TECHNICAL COLLEGES SHOWN BY STUDENT NUMBERS AT 30th NOVEMBER.

	Year of Course	1962-3	1963-4	1964-5	1965-6	1966-7
1. CRAFT COURSES						
Day Release						
Brickwork	1	19	17	19	19	16
	2	30	12	17	15	14
	3	15	23	12	16	15
	4	6	12	9	5	9
	5	-	5	7	3	4
Carpenters & Joiners	1	65	43	46	68	56
	2	61	59	35	32	60
	3	29	47	43	37	38
	4	21	25	28	22	24
	5	0	11	16	16	15
Plasterers	1	16	14	5	12	17
	2	9	17	16	7	10
	3	10	8	15	14	9
	4	3	3	4	3	10
	5	0	3	3	7	3
Plumbers	1	25	20	30	31	34
	2	28	42	20	34	43
	3	24	19	37	23	37
	4	23	19	16	30	22
	5	14	15	12	12	23
Painters & Decorators	1	14	16	11	13	26
	2	10	12	15	10	28
	3	6	8	10	13	10
	4	5	6	6	10	15
Street Masonry	1	-	-	-	11	4
	2	-	-	-	-	11
2. TECHNICIAN COURSES						
Day Release						
Construntional Technic-	1	-	-	14	-	-
ians	2	-	-	-	9	11
	3	-	-	-	18	17
3. O.N.C.						
Day Release						
Building	1	9	17	23	10	10
	2	18	10	12	24	19
	3	11	14	8	14	26
4. H.N.C. LEVEL						
Day Release						
Building H.N.C.	1	7	9	11	11	13
	2	-	6	8	8	13
Endorsements	-	-	-	-	-	12
Full Tech. Cert.	1			10	21	21
5. DEGREE LEVEL						
a) Sandwich						
Civil Engineering	1	22	28	16	21	40
(Dip. Tech. to 1965-6	2	12	22	29	17	36
C.N.A.A. 1966-7)	3	9	11	18	24	24
	4	4	9	6	19	22

APPENDIX IV TABLE (b) SUNDERLAND - CONSTRUCTION
CLASSIFICATION OF STUDENTS RELEASED TO THE SUNDERLAND COLLEGES BY SIZE OF FIRM. 1966-7.

i) CLASSIFIED BY LEVEL OF COURSE.

	NUMBER OF EMPLOYEES.					
COURSES	1-20	21-100	101-200	201-1000	1000 and over	Totals
Craft	29	76	32	2	55	194
Intermediate	2	4	6	2	7	21
Advanced	0	0	3	1	7	11
Higher	0	0	1	2	5	8
Total	31	80	42	7	74	234

ii)
CLASSIFIED BY NUMBERS OF STUDENTS RELEASED BY INDIVIDUAL FIRMS.

	NUMBER OF EMPLOYEES					
Number Released	1-20	21-100	101-200	201-1000	1000 and over	Totals
1	12	10				22
2	2	4				6
3	5	3	1			8
4	0	1	1			2
5	0	2	1			3
6-10	0	2	2	1		5
11-20	0	0	1			1
21 and over	0	1	0		1	2
Total	19	22	6	1	1	49
Firms releasing No Students	80+	23+	0	0	0	103

+ These are the firms actually registered by the local offices of the Ministry of Labour. There are likely to be several more small firms who have not needed its assistance in finding employees.

APPENDIX V TABLE (a) : SCHEME OF TRAINING AND EXPERIENCE MODULES
(E.I.T.B. Information Paper 6., May 1966)

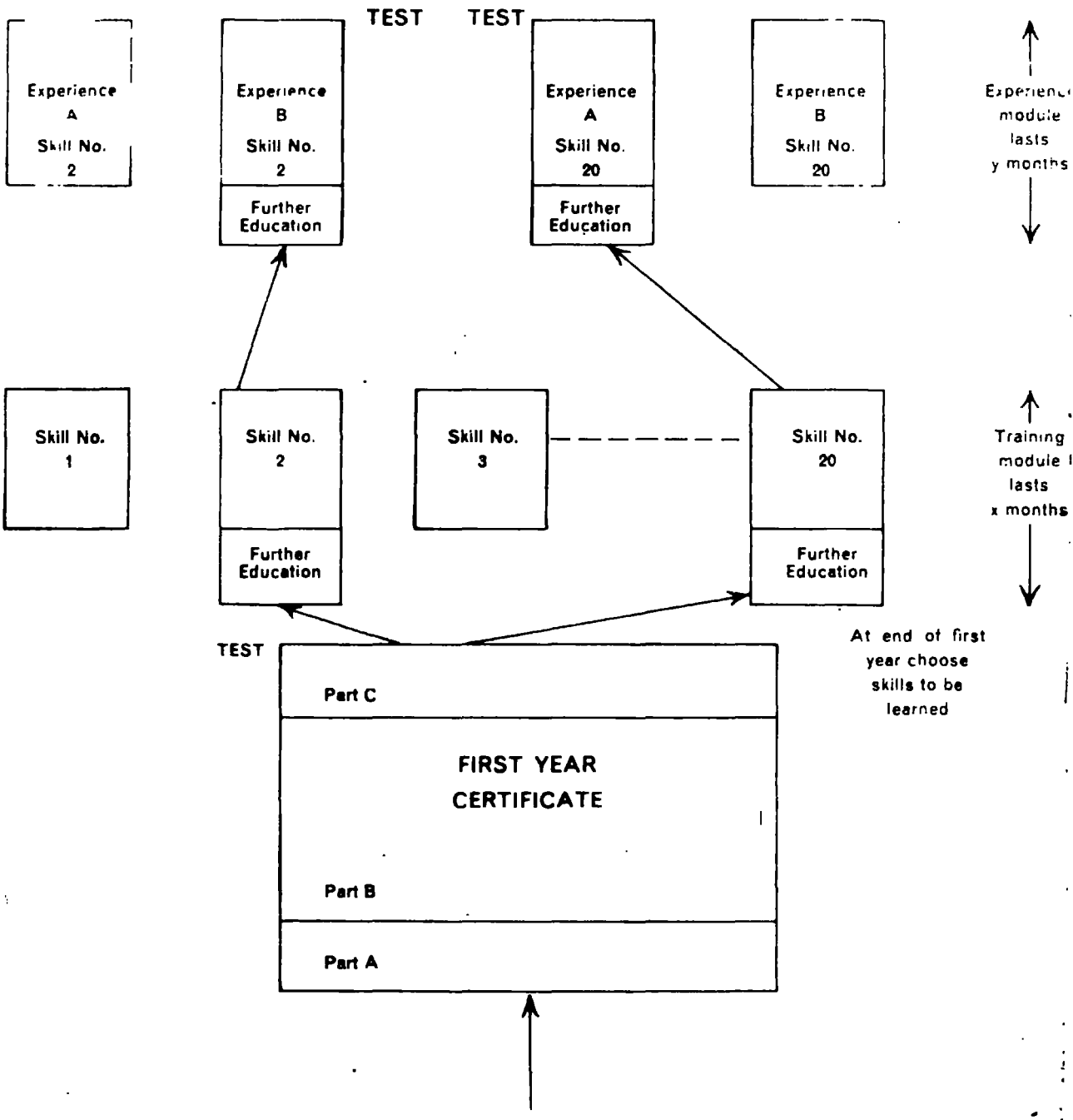


Fig. 2 Training and experience modules

APPENDIX V, TABLE (b);
THE PATTERN OF FIRST YEAR TRAINING FOR APPRENTICES.
(E.I.T.B. Information Papers No. 6, May 1966)

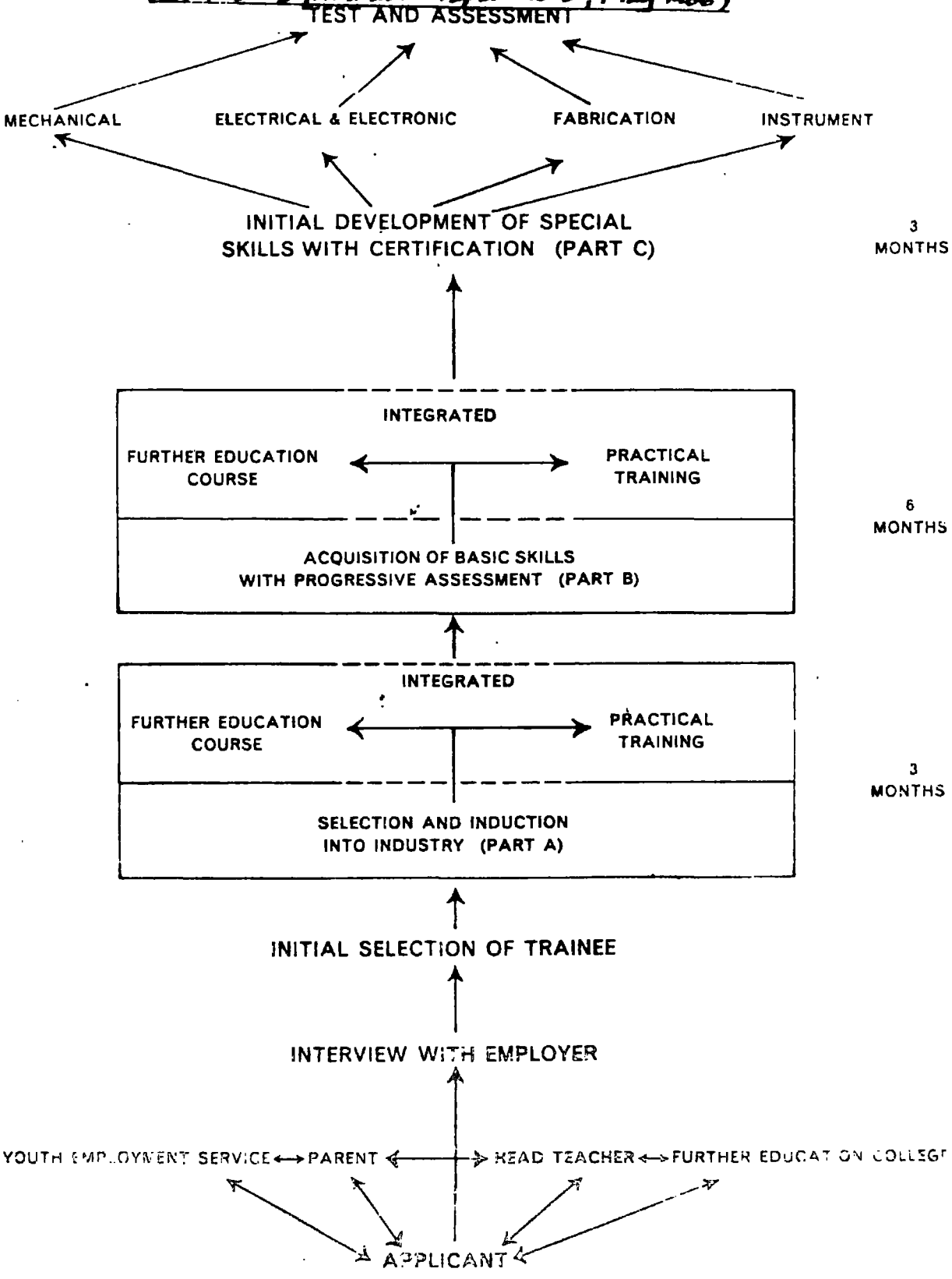
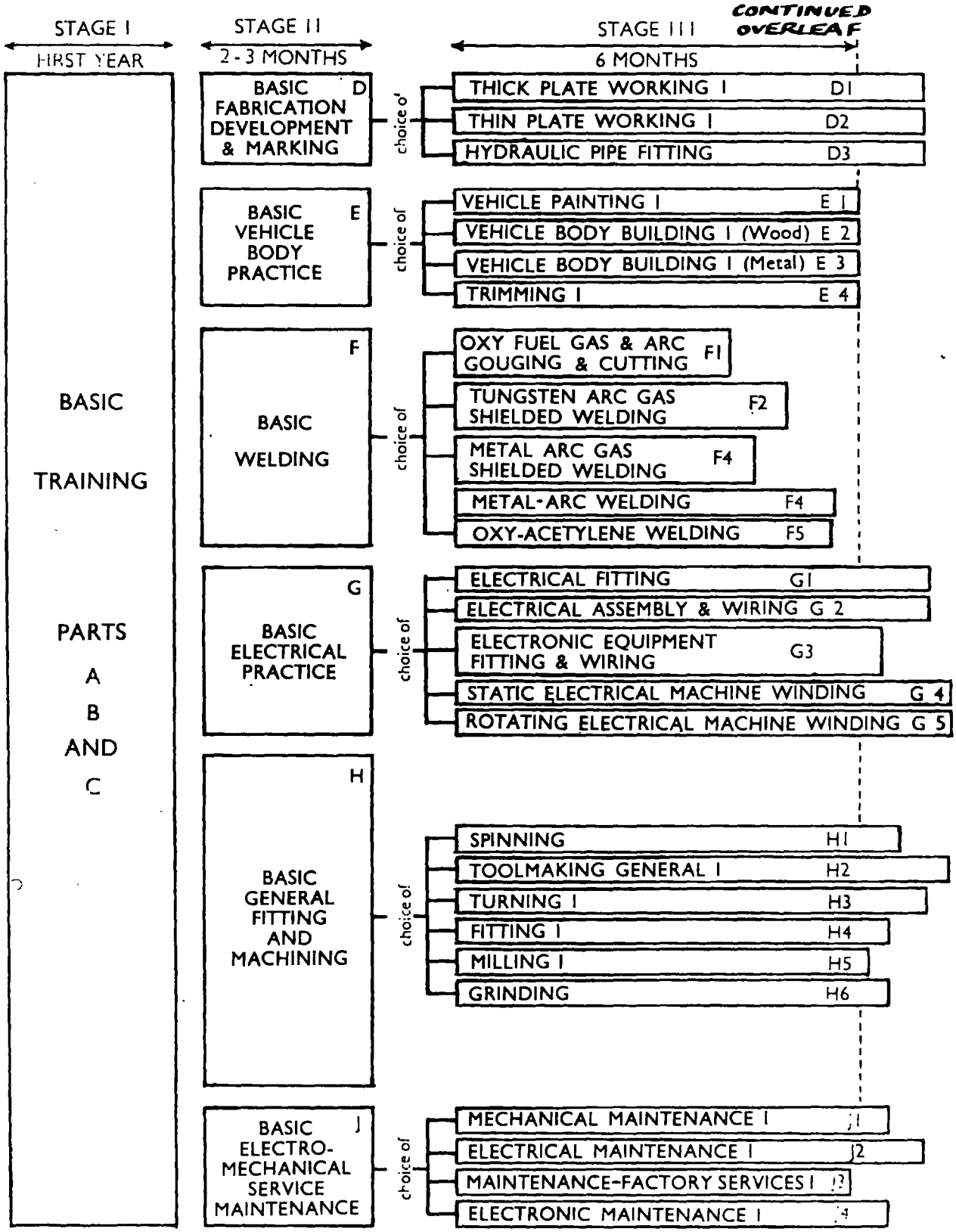


Fig. 1 The pattern of First Year Training

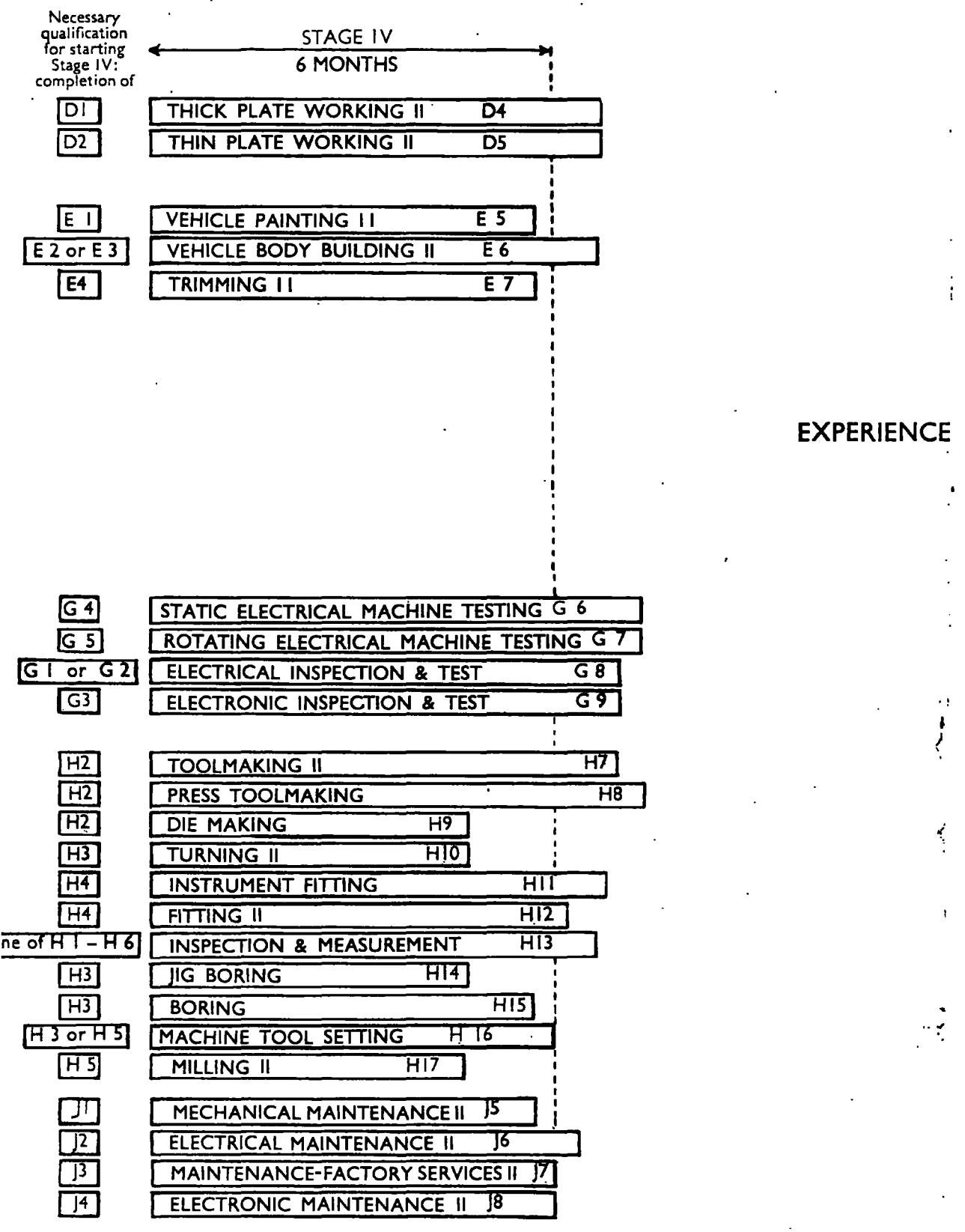
APPENDIX VC

A STRUCTURE OF CRAFT TRAINING MODULES.

(E.I.T.B. Information Paper No 11, May 1967.)



ENDIX V(c) (CONTINUED).



APPENDIX V, TABLE (d): PERFORMANCE RATING SCHEMES.
(E.I.T.B Information Paper No9., September, 1966)

Performance rating: example of calculation

Category of Employee (1)	Number of employees (2)	Number of trainees (3)	Quantity factor: trainees as per cent of total employment (4)	Quality factor: as per cent of maximum score (5)	Combined assessment: Quantity factor × Quality factor (6)
Administrative, technical and clerical staff	300	15	5·0	60	3·00
Craftsmen in skilled occupations	400	80	20·0	65	13·00
Operators requiring at least 4 weeks training	300	15	5·0	50	2·50
Other employees	100	..	..	..	..
Total	1100	110	..	..	18·50

Summary of marks awarded for training facilities, as percentage of trainee's gross wages

	Managerial staff (1)	Scientists and technologists (2)	Draughtsmen and other technicians (3)	Other administrative, commercial, clerical, etc. staff (4)	Foremen (5)	Craftsmen (6)	Operator training of 4 weeks or more (7)
Basic mark for firm which scores no marks on S.3, and does **not** give day-release **nor** employ instructors	80	50	20	20	80	20	30
Maximum addition for training facilities: **as per cent of trainee's gross wages**							
Day-release for all trainees (S.2 Section V)	—	—	10	9	—	10	—
Training staff: for optimum ratios of staff to trainees (S.2 Section VI) and for qualifications (S.3 Section IV)	3	3	16	3	3	15	15
Maintenance of training centre (S.3 Section II)	5	5	5	5	5	5	5
Provision of initial off-the-job training (S.3 Section V)	—	11	9	5	—	9	10
All other training facilities (All other S.3 questions)	20	20	20	20	20	10	10
Maximum mark obtainable for firm with all the above facilities	108	89	80	62	108	69	70

		1962-3	1963-4	1964-5	1965-6	1966-6
3) O.N.C.						
a) Day Release						
O.N.C.	1		(50)	(67)	(103)	(97)
	2	70	46	35	39	51
	3	110	90	50	50	61
b) Block Release						
O.N.C.	1				8	14
	2					15
4) H.N.C.						
a) Day Release						
Mechanical	1	26	30	29	24	0
	2	9	17	18	21	15
Electrical	1	27	37	23	21	15
	2	13	23	19	18	28
4) DEGREE LEVEL						
H.N.D. Electrical	1	17	13	21	27	28
	2	19	14	12	14	26
	3	17	20	12	12	14
H.N.D. Mechanical	1	13	12	17	10	27
	2	7	14	14	11	7
	3	10	9	11	13	12
C.N.A.A. Electrical	1	12	13	23	14	20
(London B.Sc.	2	11	11	12	24	18
to 1965-66)	3	0	11	10	10	17
	4	0	0	10	10	11

APPENDIX VI TABLE (b) SUNDERLAND - ENGINEERING
CLASSIFICATION OF STUDENTS RELEASED TO THE SUNDERLAND COLLEGES BY SIZE OF FIRM. 1966-7.

i) CLASSIFIED BY LEVEL OF COURSE

	Number of Employees					
	1-20	21-100	101-200	201-1000	1001 and over	Totals
Full Time Basic				18	52	70
Craft	14	48	2	51	141	256
Intermediate	2	14	4	70	153	243
Advanced		3	1	14	42	60
Higher	0	3	1	6	28	38
Total	16	68	8	159	416	667

ii) CLASSIFIED BY NUMBER OF STUDENTS RELEASED BY INDIVIDUAL FIRMS

	Number of Employees					
Number Released	1-20	21-100	101-200	201-1000	1001 and over	Totals
1	6	1	0	0	0	7
2	2	0	0	0	0	2
3	2	2	0	0	0	4
4	0	1	0	0	0	1
5	0	1	0	0	1	2
6-10	0	4	1	0	0	5
11-20	0	2	0	2	0	4
21 and over	0	0	0	3	4	7
Total	10	11	1	5	5	32
Firms Releasing No Students	7*	1*	1	0	0	9
Grand Total	17	12	2	5	5	41

* These are the firmsactually registered with the local offices of the Ministry of Labour. There are probably more small firms which have not needed its service in finding employees.

APPENDIX VI: TABLE (c): EXAMPLE OF QUESTIONNAIRE ON TRAINING.

II.* NUMBER OF EMPLOYEES AND TRAINEES ON THE PAYROLL AT 11TH OCTOBER 1966

	TOTAL NUMBER OF EMPLOYEES INCLUDING TRAINEES			NO. OF TRAINEES ON REGISTER	
	Male	Female	Total	Male	Female
1.	3	4	5	6	7
1. Managers, superintendents etc					
2. Scientists & Technologists					
3. Draughtsmen & Other Technicians					
4. Other administrative & office staff					
5. Foremen					
6. Craftsmen in skilled occupations					
7. Operatives needing 4 weeks training					
8. Other Employees excluding canteen staff					
TOTALS					

III. FURTHER EDUCATION

Numbers released to technical colleges on:	Male	Female
1. Day Release		
2. Block Release		

IV. Please give here the name and telephone number of the person to whom any queries arising from this return can be sent.

NAME.....TELEPHONE NUMBER...

R.WINDERS ESQ.

* Only Part II, shown here, was in fact used. Part I asked for the same data as at November 1965.

APPENDIX VI TABLE D. EMPLOYMENT STRUCTURE AND RELEASE IN SELECTED ENGINEERING FIRMS IN SUNDERLAND AT 11th OCTOBER, 1966.

* Firm CATEGORY	(A)			(B)			(C)			(D)			(E)			(F)			(G)		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
MANAGERS	1		1	2		2	2		2	2		2	2		2	22		22	42		42
TECHNOLOGISTS																			7		7
TECHNICIANS										8		8				48	3	51	6		6
OFFICE	1	4	5	4		4	1	2	3	6	4	10	5	10	15	87	28	115	31	59	90
FOREMEN	1		1	1		1	1		1	4		4	6		6	43		43	16	1	17
CRAFTSMEN	5		5	10		10	18		18	52		52	10		10	450		450	57		57
OPERATIVES	1		1				3		3	2		2	25	46	70	138	8	146	29		29
OTHER				7		7	2	3	6	7	1	8	16	9	25	48	5	53	6	152	158
TOTAL	9	4	13	24	0	24	27	5	32	81	5	86	63	65	128	836	44	880	194	242	406
DAY RELEASE	1	0	1	4	0	4	0	0	0	15	0	15	1	0	0	30	0	30	8	0	8
BLOCK RELEASE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65	-	65	-	-	-

		(H)			(K)			(L)			(M)			(N)			(O)				
MANAGERS	9		9	13		13	21		21	13		13	5	1	6	31		31			
TECHNOLOGISTS	3		3	1		1	5		5							16		16			
TECHNICIANS	25	1	26	37		37	77		77	14		14	7		7	36		36			
OFFICE	28	12	40	60	43	103	91	65	156	191	115	306	5	14	19	49	57	106			
FOREMEN	21		21	33		33	42		42	76		76	13		13	57	1	58			
CRAFTSMEN	72		72	151		151	632		632	165		165	43		43	120		120			
OPERATIVES	374	190	564	273		273	270		270	872	252	4339	10	396	406						
OTHER	153	12	165	92	5	97	252		252	190	36	226	20	239	259	677	143	820			
TOTAL	683	215	898	660	48	708	1390	65	1455	1521	267	5419	103	650	753	986	201	1187			
DAY RELEASE	9	-	9	31	-	31	59	-	59	26	2	28	3	-	-	27	1	28			
BLOCK RELEASE	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	11	-	-			

* For full titles of category see specimen questionnaire in preceding table. (Appendix VI (c)).

Notes: A.B.C.D. Etc. are code names of firms used in Chapter 7, pages 105-112.
Three columns are shown M - Male, F - Female, T - Total of Employees.

APPENDIX VII TABLE (a) SUNDERLAND.

STUDENT NUMBERS ON VOCATIONAL BUSINESS STUDIES COURSES AT MONKWEARMOUTH COLLEGE 1962 - 3 TO 1967-8.

COURSES	1962-3	1963-4	1964-5	1965-6	1966-7	1967-8
FULL TIME						
Medical Secretaries	-	-	-	-	16	4
Sec./Receptionist	26	24	35	15	18	26
Sec./Clerical	55	44	63	67	56	56
Intensive Sec.	-	-	7	-	-	-
Advanced Sec.		5	12	23	3	26
OND Bus. Studies	41	29	3	22	10	13
Total Full Time	122	102	120	127	103	125
PART TIME DAY						
General Commercial	-	5	9	28	18	44
Cert. in Office Studies	-	-	5	6	27	15
Secretarial	30	33	36	44	45	51
Diploma in Municipal Admin.	17	-	14	-	-	-
Intermediate Professional	-	11	13	14	39	28
Journalists	-	17	16	-	-	-
RSA Teachers	-	-	20	21	10	-
ONC Business Studies	37	38	39	81	68	41
Retail Distribution	-	-	31	23	45	78
Total Part-Time	84	104	183	217	252	257
EVENING						
General Commercial	69	42	38	19	7	5
Cert. in Office Studies	-	27	20	12	10	18
Secretarial	630	641	652	649	650	640
Intermediate Professional	18	28	20	17	30	25
RSA Teachers	28	31	33	8	-	8
ONC Business Studies	40	43	45	56	30	-
Retail Distribution	21	21	24	53	23	25
Inst. of Meat	29	16	22	-	-	-
Inst. of Grocers	17	15	11	-	-	-
Coop Managers	-	22	20	-	-	-
Inst. of Transport	-	-	9	-	6	7
Local Govt.	20	28	18	23	15	9
Inst. of Bankers	17	21	32	36	34	26
Legal Executives		11	11	9	10	9
Total Evening	889	946	955	882	815	772
Grand Total	1095	1152	1258	1226	1170	1154

APPENDIX VII TABLE (b) SUNDERLAND.
DAY RELEASE STUDENT NUMBERS 1967-8 ON BUSINESS STUDIES COURSES AT MONKWEARMOUTH COLLEGE CLASSIFIED BY STANDARD INDUSTRIAL GROUPS.

NO.	TITLE[1]	SECRETARIAL	OFFICE STUDIES AND GENERAL COMMERCIAL	ONC BUSINESS STUDIES	TOTALS
1	Agric.Forestry Fishing	0	0	0	0
2	Mining & Quarrying	0	1	3	4
3	Food, Drink, Tobacco	3	0	0	3
4	Chemicals	0	0	0	0
5	Metal Manufacture	0	0	0	0
6	Engineering	16	17	30	63
7	Shipbuilding	0	2	2	4
8	Vehicles	0	0	0	0
9	Other Metal Goods	0	0	0	0
10	Textiles	13	2	11	26
11	Leather and Fur	0	0	0	0
12	Clothing and Footwear	0	0	0	0
13	Bricks, Pottery, Glass.	4	11	5	20
14	Timber, Furniture Etc.	0	0	0	0
15	Paper, Printing & Publishing.	4	2	0	6
16	Other Manufacturing	0	0	0	0
17	Construction	2	2	1	5
18	Gas,Electricity, Water	0	5	4	9
19	Transport & Communication	2	1	1	4
20	Distribution	2	2	2	6
21	Insurance,Banking,Finance	2	0	1	3
22	Professional&Scientific	3	0	1	4
23	Miscellaneous Services	0	1	0	1
24	Public Admin. & Defence	16	1	4	21
		67	47	65	179

1. Details of the groupings are given in the 'Standard Industrial Classification' Central Statistical Office. H.M.S.O. 1958.

APPENDIX VIII TABLE (a) - GREAT BRITAIN
TOTAL STUDENT NUMBERS BY PERIOD OF COURSE AT ALL GRANT AIDED ESTABLISHMENTS FOR 1951, 1956, and 1961-66, (RETURNED ANNUALLY IN NOVEMBER).

NUMBERS IN THOUSANDS

PERIOD OF COURSE	1951-2	1956-7	1961-2	1962-3	1963-4	1964-5	1965-6	1966-7
Full Time	46.6	62.7	118.8	140.7	156.7	167.3	169.8	181.7
Sandwich	-	4.0	8.0	9.7	11.9	14.1	17.2	20.7
Part Time Day	298.1	421.8	549.0	595.6	608.3	644.2	679.8	711.9
(Day Release)[1]	(261.5	378.4	487.7	526.2	541.1	570.6	602.0	625.0)
Evening Only[2]	550.3	635.0	773.5	809.9	773.9	773.8	795.9	802.5
Evening Institutes[2]	993.1	780.8	962.6	1039.1	1075.4	1131.5	1252.9	1374.1
All Courses	1888.1	1904.3	2407.4	2590.3	2621.4	2725.0	2915.6	3091.0

Source: Statistics of Education 1965 Table 19.

1. The Day Release figures form part of the total 'Part Time Day' students shown in the line above.
2. "Evening Only" students are attending Colleges of Further Education where courses are mainly vocational. "Evening Institute" courses are mainly recreational. Statistics are not published for vocational and non-vocational courses as separate totals.

APPENDIX VIII TABLE (b) GREAT BRITAIN.

STUDENTS AGED 15-17 ON DAY RELEASE 1962-3 TO 1966-7 SHOWN AS A PERCENTAGE OF THE TOTAL EMPLOYEES IN THE AGE GROUP FOR EACH INDUSTRIAL CLASS.

1 TITLE	CLASS NO.	1962-3 Boys	1962-3 Girls	1963-4 Boys	1963-4 Girls	1964-5 Boys	1964-5 Girls	1965-6 Boys	1965-6 Girls	1966-7 Boys	1966-7 Girls
Agriculture etc.	1	11.9	5.7	12.9	4.3	16.8	5.4	19.2	7.0	19.5	6.2
Mining	2	42.7	12.2	39.2	9.5	39.9	9.3	42.9	9.6	44.9	11.9
Food Etc.	3	16.0	7.4	18.5	7.5	19.2	7.3	20.5	7.2	18.9	6.8
Chemicals	4	54.2	19.1	61.0	19.4	57.6	18.0	55.9	17.8	62.7	15.8
Metals	5	50.3	16.4	49.1	15.5	56.0	21.4	56.0	24.3	61.2	28.2
Engineering	6	60.3	8.7	61.3	8.3	62.5	8.0	69.9	9.5	76.1	11.1
Shipbuilding	7	42.3	5.8	46.2	6.8	44.8	8.1	56.5	15.4	57.2	17.5
Vehicles	8	50.6	10.5	49.9	10.1	53.0	12.0	57.0	13.3	64.1	13.3
Metal Goods	9	17.5	5.3	18.2	4.3	18.8	3.5	20.1	4.8	19.2	4.8
Textiles	10	15.0	2.5	16.0	2.2	16.5	2.5	15.8	2.6	14.0	2.9
Leather etc.	11	11.6	3.5	5.5	1.2	6.4	1.5	4.5	1.6	5.5	2.2
Clothing	12	11.5	2.3	14.5	2.3	14.4	2.2	16.6	2.5	14.4	2.4
Glass etc.	13	12.4	2.5	11.0	3.3	10.3	3.1	13.1	3.9	13.2	3.5
Timber etc.	14	17.8	2.1	20.1	2.0	19.1	1.7	19.4	1.8	20.0	2.5
Paper ing	15	41.6	2.3	42.5	2.4	37.3	2.2	38.8	2.5	38.5	2.4
Other Manufactur	16	21.2	4.4	22.6	4.3	21.1	3.8	19.2	5.0	20.7	4.5
Constructional	17	40.9	4.4	41.4	4.6	44.2	4.9	41.7	4.4	42.0	5.4
Supply	18	104.4	32.3	86.0	29.5	85.2	23.1	97.9	25.0	99.7	25.9
Transport	19	25.8	17.2	31.2	17.5	27.7	17.7	30.0	18.0	33.9	23.6
Distribution	20	7.6	2.3	6.6	2.1	6 .7	2.0	6.1	1.9	5.8	1.8
Banking etc.	21	8.9	1.2	9.6	1.2	9.7	1.2	8.9	1.3	8.9	1.5
Professional Miscellaneous) Services)	22 23	30.5 22.8	24.3 9.2	31.5 22.2	23.9 9.9	33.0 23.8	24.7 10.1	34.3 25.1	25.7 11.2	33.1 27.0	27.1 13.3
Administration	24	71.6	62.3	77.5	58.3	80.6	65.0	85.0	68.5	92.9	79.5
Average of Total		30.3	7.4	30.2	7.1	31.0	7.3	32.6	7.7	34.3	8.5

1. Titles are given more fully in Appendix VII(b)
For basis of classification see the Standard Industrial Classification Central Statistical Office. H.M.S.O. 1958.
Sources: This table is compiled from the successive tables in the Department of Education and Science "Statistics of Education" published annually. They are:
1962 Vol II Table 20 1963 Vol. II Table 22
1964 Vol II Table 22 1965 Vol. II Table 32
1966 VolIII Table 16.

APPENDIX VIII TABLE (c) GREAT BRITAIN.

CHANGES IN THE PERCENTAGE OF STUDENTS AGED 15 - 17 RELEASED BY THEIR EMPLOYERS, BY INDUSTRIAL TRAINING BOARD GROUPS† FOR THE TWO YEARS BEFORE AND AFTER THE INDUSTRIAL TRAINING ACT 1964.

Industrial Training Boards and Relevant Industrial Groups in Order of Establishment.	Change in Percentage. 1962-3 to 1964-5		Change in Percentage. 1964-5 to 1966-7		Numbers Employed June, 1966	
	Boys	Girls	Boys	Girls	Boys	Girls
Boards established before 1964-5 Session.						
*Wool, Jute & Flax. (Part of X).	(+1.5	0	-2.5	+.4),	16,110	31,002
*Iron and Steel. (Part of V)	+5.7	+5.0	+5.2	+6.8	16,027	5,658
Engineering (VI)	+2.2	-.7	+13.6	+3.1	65,636	44,229
Construction (XVII)	+3.3	+.5	-2.2	+.5	86,179	7,197
Established before 1965-6 Session						
Shipbuilding (VII)	+2.5	+2.4	+12.4	+9.4	7,060	707
Electricity Supply, Water Supply, Gas Supply XVIII	-19.2	-9.2	+14.5	+2.8	7,619	3,312
Ceramics, Glass & Minerals (XIII)	-2.1	+.6	+2.9	+.4	10,932	6,279
Established before 1966-7 Session						
Furniture & Timber (XIV)	+1.4	-.4	+.9	+.8	17,606	4,693
Man Made Fibres, Carpets, Knitting, Lace and Net, Cotton & Allied Textiles Part of X	(+1.5	0	-2.5	+.4)		
*Agriculture, Horticulture and Forestry. Part of I	+4.9	-.3	+2.7	+.8	16,110	31,002
Established since September, 1966.						
Road Transport (Part of XIX)	(+1.9	+.5	+3.2	+5.9	23,309	13,108
*Hotel and Catering (Part of XXIII)	+1	+.9	+3.2	+3.2	66,676	49,735
Civil Air Transport (Part of XIX)	+1.9	+.5	+3.2	+5.9	23,309	13,108
*Rubber and Plastics, *Chemicals, *Petroleum IV	+3.4	-1.1	+5.1	-2.2	7,583	12,452
Industries Not Served by an I.T.B. March, 1968.						
II Mining (Note: Quarrying is part of Ceramics ITB)	-2.8	-2.9	+5.0	+2.6	15,075	1,214
III Food, Drink & Tobacco.	+3.2	-.1	-.5	-.5	17,814	25,425
XI Leather Goods & Fur.	-5.2	-2.0	-.9	+.7	2,308	2,412
XII Clothing and Footwear	+2.9	-.1	0	+.2	10,503	48,768
XV Paper, Printing & Publishing	-4.3	-.1	+1.2	+.2	18,063	21,427
XX Distributive Trades	-.9	-.3	-.9	-.5	118,206	222,044

VIIIc (Cont)

	Change in Percentage. 1962-3 to 1964-5		Change in Percentage. 1964-5 to 1966-7		Numbers Employed. June, 1966	
	Boys	Girls	Boys	Girls	Boys	Girls
XXI Insurance, Banking and Finance.	+.8	0	-.8	+.3	9,047	31,794
XXII Professional & Scientific	+2.5	+.4	+.1	+2.4	13,940	35,795
XXIV Public Administration and Defence.	+9	+2.7	+12.3	+4.5	12,199	13,258

NOTES. [1] No other statistics have been published to show the increase in release which has been effected by each board.
The table above uses what statistics are available from the annual 'Statistics of Education' (See previous table) -(VIIIa)
The Industrial Training Boards do not correspond directly to the 24 divisions of the Standard Industrial Classification. In the table figures are given in brackets where a particular board covers only a small part of an industrial group. Where a board covers a large proportion of a group it is marked with an asterisk.
Other Boards serve practically the whole of their relevant group.

APPENDIX IX TABLE (a) SUNDERLAND.

TOTAL STUDENTS ON DAY RELEASE TO THE SUNDERLAND COLLEGES BY STANDARD INDUSTRIAL GROUPS FOR THE SESSIONS 1961/2, 1964/5 and 1967/8.

ORDER	BRIEF TITLE	1961/2	1964/5	1967/8
1.	Agriculture+	1	0	3
2.	Mining +	471	440	551
3.	Food	26	57	102
4.	Chemicals ++	67	69	57
5.	Metal Manufacture ++	92	105	203
6.	Engineering ++	411	487	513
7.	Shipbuilding ++	460	364	397
8.	Vehicles ++	128	3	152
9.	Other Metals	18	2	13
10.	Textiles ++	8	15	18
11.	Leather	0	0	0
12.	Clothing	18	51	40
13.	Bricks,Pottery etc.++	46	16	107
14.	Timber, Furniture ++	40	38	43
15.	Paper, Printing. ++	25	86	48
16.	Other Manufacturing	3	10	5
17.	Construction ++	363	393	408
18.	Supply Industries ++	60	49	46
19.	Transport +	28	47	21
20.	Distribution	12	72	92
21.	Insurance etc.	0	5	3
22.	Professional	128	124	71
23.	Other Services	123	160	198
24.	Public Administration	158	290	406
Totals		2586	2883	3497

++ Wholly served by Industrial Training Boards.

+ Partly served by Industrial Training Boards.

APPENDIX IX TABLE (b) SUNDERLAND.

TOTAL EMPLOYEES BY STANDARD INDUSTRIAL GROUPS FOR THE THREE SUNDERLAND EMPLOYMENT AREAS[1] JUNE 1961, JUNE 1964 AND JUNE 1966[2].

ORDER	BRIEF TITLE	1961			1964			1966		
		MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
1.	Agriculture	179	33	212	116	17	133	93	19	112
2.	Mining	6561	153	6714	5159	129	5288	5097	110	5207
3.	Food	1465	1015	2480	1434	760	2194	1301	681	1982
4.	Chemicals	355	84	439	333	133	466	288	101	389
5.	Metal Manufacture	1402	101	1503	1303	84	1387	1255	84	1339
6.	Engineering	5069	2817	7886	6568	4084	10652	9319	4867	14186
7.	Shipbuilding	12422	416	12838	9596	382	9978	9808	413	10226
8.	Vehicles	869	62	931	931	53	984	829	49	878
9.	Other Metals	910	266	1176	826	196	1022	820	175	995
10.	Textiles	246	466	712	236	593	829	211	519	730
11.	Leather	0	4	4	0	0	0	1	0	1
12.	Clothing	355	2800	3155	342	2833	3175	354	2741	3095
13.	Bricks, Pottery	2339	932	3271	2200	757	2957	2302	963	3265
14.	Timber, Furniture	936	182	1118	1142	156	1298	1027	183	1210
15.	Paper, Printing	1141	555	1696	1390	598	1988	1339	621	1960
16.	Other Manufact.	115	46	161	81	46	127	121	54	175
17.	Construction	5493	228	5721	5807	252	6059	4953	218	5171
18.	Supply	1366	344	1710	1681	398	2079	1263	258	1521
19.	Transport	3824	417	4241	3634	428	4062	3375	448	3823
20.	Distribution	4349	8614	12963	4228	9639	13867	4653	10121	14774
21.	Insurance etc.	513	438	951	553	427	980	590	928	1118
22.	Professional	2097	5090	7187	2459	5664	8123	2562	6280	8842
23.	Other Services	2773	4710	7483	2947	4242	7189	3304	4401	7705
24.	Public Admin.	2011	572	2583	1587	295	1882	1692	412	2104
Totals		56843	30389	87232	54642	32307	86949	56852	34435	91287

1. Sunderland, Pallion and Southwick.

2. Statistics are not yet available for June, 1967. They are normally circulated over a year after collection i.e. August/September, 1968.

APPENDIX IXC - SUNDERLAND DISTRICT - PLACEMENT OF SCHOOL LEAVERS BY OCCUPATIONS 1962-3, 1964-5, 1966-7.

INDUSTRY	1962-3 BOYS	1962-3 GIRLS	1964-5 BOYS	1964-5 GIRLS	1966-7 BOYS	1966-7 GIRLS
Agriculture *	6	0	8	0	5	0
Building	74	0	115	0	91	0
Catering	17	54	27	29	27	25
Clerical	77	296	71	375	55	410
Clothing	0	242	0	269	0	193
Coal	13	0	0	0	0	0
Distribution	159	267	[illegible]	[illegible]	258	200
Engineering	103	0	156	0	168	0
Factory	175	304	316	[illegible]	216	216
Hairdressing	0	6	0	9	0	16
Laboratory	3	4	5	4	5	4
Nursery & Hospitals	0	5	0	7	0	7
Printing	4	0	7	0	18	0
Shipbuilding	14	0	[illegible]	0	63	0
Miscellaneous	19	[illegible]	[illegible]	28	56	23
Totals	674	1189	1129	1216	962	1094

1. All columns include residents within the district and those from other districts but employed by Sunderland firms.

APPENDIX IXd - SUNDERLAND DISTRICT - PLACEMENT OF SCHOOL LEAVERS AND NUMBER OF TRAINEES[1] 1966-7.

	BOYS		GIRLS	
	TRAINEES	OTHERS	TRAINEES	OTHERS
Agriculture	5	0	0	0
Building	54	37	0	0
Catering	14	13	1	24
Clerical	9	46	1	409
Clothing	0	0	2	191
Coal	0	0	0	0
Distribution	66	192	139	61
Engineering	143	25	0	0
Factory	0	216	193	23
Hairdressing	0	0	16	0
Laboratory	5	0	3	1
Nursery	0	0	7	0
Printing	9	9	0	0
Shipbuilding	47	16	0	0
Miscellaneous	0	56	5	18
Totals	352	610	367	727
Grand Totals	962		1094	

1. Numbers are given for various categories in the report. Those referred to as trainees e.g. "Trainee Sales - Clothing" and those referred to as apprentices e.g. "Apprentice Upholsterer" are classified in this table as "trainees" though there is no indication of the period of training involved.

APPENDIX X NOTES ON SOURCES.

a) Statistical Returns.

From 1957-8 returns of student numbers at each college in November have been required by the Ministry of Education, now the Department of Education and Science. Before 1957-8 summary returns were made. A copy of all returns must be available in the college office for inspection at any time.
The following tables were compiled from these returns;

APPENDIX I	(a) & (b)
APPENDIX III	(a)
APPENDIX IV	(a)
APPENDIX VI	(a)
APPENDIX VII	(a) & (b)
APPENDIX IX	(a)

All courses current on 1st November (15th November to 1962-3) must be totalled from attendance registers, and submitted to the statistics division of the Department of Education and Science. The information included is:
FORM 103 F.E. - Numbers on each FULL TIME course by sex.
FORM 104 F.E. - " " " SANDWICH " " "
FORM 105 F.E. - " " " DAY or BLOCK " "
FORM 106 F.E. - " " " EVENING " " "
FORM 107 F.E. Totals of all courses divided by age and sex for:
(I) Full time.
(II) Short full time.
(III) Sandwich.
(IV) Part Time Day (Excluding those on release)
(V) Evening Only.
FORM 108 F.E. - Totals by age and sex for all Day and Block Release Students classified by Industry of Employer.

b) Statistics of Education.

National and Regional totals compiled from the annual college returns are published by H.M.S.O. as "Statistics of Education". The latest edition is for the 1966-67 session, the further education volume of which was published in April, 1968. In 1966 the volumes were reorganised so that further education is now Volume III. In previous years further education is in Volume II. Reference to particular tables are given as footnotes in the appendices.
APPENDIX VIII (a)(b) and (c) is compiled from the relevant volumes of "Statistics of Education".

c) Industrial Training Board Material.

APPENDIX II (a) is a modified version of Appendix (c) of the Shipbuilding

I.T.B. annual report to 31st March, 1967.

APPENDIX V (a)(b)(c)(d) is pages from information papers circulated by the Engineering I.T.B.

d) College Record Cards.

There is no standard pattern for college record cards. Each of the Sunderland Colleges has at least a record of name, address, age, current course and employer (where appropriate) for each student. These records were used to obtain the classification of numbers released by size of firm in

APPENDIX IV (b) Construction
APPENDIX VI (b) Engineering

e) Ministry of Labour and Youth Employment Material.

Local employment exchanges have records of all firms in each area which have asked for assistance in finding personnel. There are therefore a number of small firms which are not listed because the occasional new entrant is found privately, often by advertising in the local press, or by recommendation from another employee. Appendices IV (b) and VI (b) include all firms which are on the Employment Exchange lists plus those not listed, but granting release to colleges. Appendix IX (b) is compiled from summary returns which are available from local offices. The three areas which form the County Borough of Sunderland are Sunderland, Pallion and Southwick. Appendix IX (c) & (d) is from the annual reports of the Local Youth Employment service.

f) Questionnaire.

A questionnaire was circulated to all Engineering firms in Sunderland with more than 20 employees. A copy of the questionnaire is included as Appendix VI(c). 16 of the 22 firms replied and examples from these are included as Appendix VI(d). The questionnaire is divided to correspond with the Engineering Training Board Questionnaire S.2. The information is not available direct from the Training Board since details of particular firms are confidential.

APPENDIX XI a

(COPY)

NINTH REPORT FROM THE ESTIMATES COMMITTEE

SESSION 1966-1967

MANPOWER TRAINING FOR INDUSTRY

SUMMARY OF RECOMMENDATIONS

(1) The Ministry of Labour should direct Industrial Training Boards to pay particular attention to the recruitment of training staff and to carry out visits of inspection to firms within their industry on the lines of those of the Engineering Industry Training Board.

(2) The Ministry of Labour should notify Industrial Training Boards that the Minister will not approve a proposal for levy which exceeds the minimum sufficient to cover administrative expenses so that boards will make their first task a comprehensive study of the long term needs of the industry.

(3) The Ministry of Labour should establish without further delay an Industrial Training Board covering the printing and publishing industry.

(4) Before 1970 the Ministry of Labour, in conjunction with the Organisation and Methods Division of the Treasury, should carry out a comprehensive examination of the organisation of the Central Training Council with a view to ascertaining whether any alterations are necessary in its administration or functions.

(5) The Ministry of Labour should take steps to see that the recommendations of the Management Training and Development Committee of the Central Training Council are put into effect as soon as possible, and in particular should either make direct grants, or should instruct Industrial Training Boards to make grants, to firms to enable them to send suitable people on courses of management training.

(6)(*a*) The Ministry of Labour and the Industrial Training Boards should make every effort to persuade firms that instruction is a technique requiring training, and to this end should consider increasing the amount of grant payable to firms who send their staff on courses for training officers ;

(*b*) The Ministry of Labour should agree with the Treasury new scales of pay for the instructor and training service officer grades with a view to giving them parity with their counterparts in the educational services ;

(*c*) The Ministry of Labour should give urgent attention to the proposal for a national centre for industrial training, and should either establish it or greatly expand the Instructor Training Colleges.

(7) The Manpower Research Unit of the Ministry of Labour should carry out a comprehensive assessment of the future manpower needs of every industry with a view to establishing the way in which retraining can contribute to an effective redeployment of labour.

APPENDIX XI(b)

Copy

TRAINING FOR SKILL—THE TIME FOR CHANGE

1. The Industrial Training Act aims to ensure that enough workers with the requisite skills are available in the right places at the right time to do efficiently the jobs needing to be done. It also aims to provide better opportunities to individuals to develop their skills and use their abilities to the full. This does not simply mean more training for more people. It means new and improved systems of training determined in the light of modern needs, but flexible enough to adapt to technological and other changes; relevant to the experience, learning ability and prospects of the individual; effective in ensuring standards of competence and systematically planned and executed so as to meet the requirements of cost effectiveness and to encourage those attitudes and habits of work which promote efficiency.

2. In the four years since the Act was passed, 25 industrial training boards have been created. Many of them are now well established and have developing resources not only for encouraging firms in their industries to emulate the training practices of the best, but also for establishing training plans in areas where they have not previously been formulated and for assessing existing training schemes in depth with a view to recasting them where necessary in the light of present needs. We are therefore now beginning to see more clearly the nature and implications of some of the major changes the Act was designed to achieve.

3. The need for change is not confined to particular industries or groups of occupations. The training boards are concerned with occupations of all kinds and at all levels in industry and commerce. The wide range of training recommendations they have already published gives pointers to progress in many areas. Such progress will often involve in varying degrees the adaptation or abandonment of traditional and familiar ways of doing things. This is pre-eminently so in regard to training for skilled work which is still in many respects bound by the rigidities and formalities of the deeply-rooted system of craft apprenticeship.

4. The need for this new approach is indeed being ever more widely realised. In a number of industries in recent years there has been some movement towards shorter periods of apprenticeship as a result of joint agreement between employers' associations and trade unions. Important initiatives have also been taken by a number of training boards in recommending to their industries programmes of craft training related more to the learning requirements of actual jobs than to traditional arrangements. These have led, in the engineering, foundry, iron and steel and shipbuilding industries, to the development of common courses of broad-based initial training to be given off-the-job to trainees who will subsequently specialise in various crafts. More fundamental changes are envisaged in the Engineering Industry Training Board's module system of training for engineering craftsmen. This system is based on the concept that the acquisition of given standards of skill is dependent on the aptitude of the individual and on his ability to absorb technical knowledge; it gets away from traditional craft demarcations and it provides for additional training throughout a man's career so that he can adapt to technical and other changes as they occur. Other training boards too, (e.g. Construction, Furniture and Timber, Hotel and Catering) are examining or preparing new schemes of training based on the module idea. Like the Engineering Board's scheme, such proposals will need to be formulated in close consultation with the industries concerned. There will generally be need, too, for experimentation in determining the broad lines of new schemes of training at the national level and for flexibility and imagination in applying them to meet individual needs at the plant level.

5. In the light of these developments and of the benefits they promise to industry through the more efficient use of manpower, and to individual workers through extended opportunities of using their talents more fully, the Council draws the attention of all training boards, employers' associations and trade unions, managers and workers, trainers and trainees, to the urgent need for wider consideration and application of the following principles:—

(*a*) The aim should be to establish training systems in which initial training and further training opportunities are available, subject to employment demands and prospects, to all employees capable of benefiting from such opportunities, irrespective of age, sex, length of service or other restrictive conditions.

(*b*) Programmes of training should be based on an analysis of relevant jobs. The initial training of young people should be broadly based, and subsequent training geared more closely to specific requirements.

(XI b Cont-)

(*c*) The duration of training should be a function of what requires to be learned, flexibility being allowed to take account of the maturity, experience and learning ability of the individual trainee.

(*d*) All young trainees should receive the further education necessary to complement and re-inforce their industrial training.

(*e*) Apart from the initial training and complementary further education for young people there should be a recognisable correspondence between the training provided for young people and that provided for adults, particularly as regards the standards of competence achieved at the end of training.

(*f*) To meet the requirements arising from changes in technology and other factors influencing the work situation, including, for example, the growth of new industries in areas of special development, opportunities should be provided for workers to receive such training and further education as may be necessary throughout their working life.

(*g*) Apart from industry's immediate and forseeable requirements, workers should be encouraged to take courses likely to improve their prospects of more highly skilled employment.

(*h*) Systematic means of assessment should be increasingly used both for the selection of people for training and to establish their competence during the training itself. Subject to availability, skilled jobs should be open to any worker who has established his competence to do them.

6. We are convinced that these principles must be fully understood and applied if training is to make the most effective contribution to industrial and commercial efficiency. We therefore call on all industrial training boards to pay full regard to these principles in formulating and recommending schemes of training. At the same time we recognise that such training schemes will call for changes also in periods of apprenticeship, traditional distinctions between occupations, established wage and career structures and many other related matters which are the direct concern of the established negotiating and consultative bodies of industry. There is accordingly urgent need for close co-operation between these bodies and the training boards to ensure informed discussion of such changes and co-ordinated action on them and we suggest that they should together consider what arrangements for consultation of this sort would be most suitable.

September, 1968.

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