DOCUMENT RESUME

ED 060 427 AC 012 432

AUTHOR	Sudale, E. W.
TITLE	Continued Education. A Study of the Education of Young European School Leavers During Their Last Years at School and Early Years at Work.
INSTITUTION	Council of Europe, Strasbourg (France). Council for Cultural Cooperation.
PUB DATE	71
NOTE	115p.
AVAILABLE FROM	Directorate of Education and of Cultural and Scientific Affairs, Council of Europe, 67-Strasbourg, France (no price quoted)
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	Adult Education Programs; *Apprenticeships; *Continuation Education; Continuous Learning; Curriculum Evaluation; Educational Needs; General Education; Job Skills; Socioeconomic Influences; *Teacher Education; *Teenagers; Unskilled Workers; *Vocational Education; *Work Study Programs; Youth Opportunities
IDENTIFIERS	*Europe

ABSTRACT

The educational needs and aspirations of a large proportion of Europe's teenagers (13 to 18 years of age) and the provision that is or should be made for them are the subject for this study. Part I of the study describes the pace and magnitude of some of the main socioeconomic changes that are transforming the face of Europe in the second half of this century. Particular emphasis is given to those aspects which most affected the lives of young people who receive only the minimum compulsory schooling before entering employment as apprentices or unskilled workers. Parts II, III and IV review the steps being taken by the education and other authorities responsible for the education and training of these young people to strengthen their capacity to respond to this challenge. Some implications for the recruitment, training and professional development of their teachers are explored briefly in Part V. Part VI attempts to suggest answers to two questions: (1) Is the educational response adequate to meet the socioeconomic challenge? and (2) What more needs to be done? Publications of the Council for Cultural Co-operation related to Education in Europe as well as Companion Volumes are listed. The addresses of sales agents for the Council's publications are given. (Author/DB)

The Council of Europe was established by ten nations on 5 May 1949, since when its membership has progressively increased to eighteen. Its aim is "to achieve a greater unity between its Members for the purpose of safeguarding and realising the ideals and principles which are their common heritage and facilitating their economic and social progress". This aim is pursued by discussion of questions of common concern and by agreements and common action in economic, social, cultural, scientific, legal and administrative matters.

The Council for Cultural Co-operation was set up by the Committee of Ministers of the Council of Europe on 1 January 1962 to draw up proposals for the cultural policy of the Council of Europe, to co-ordinate and give effect to the overall cultural programme of the organisation and to allocate the resources of the Cultural Fund. It is assisted by three permanent committees of senior officials: for higher education and research, for general and technical education and for out-of-school education. All the member governments of the Council of Europe, together with Finland, Spain and the Holy See which have acceded to the European Cultural Convention, are represented on these bodies [1].

In educational matters, the aim of the Council for Cultural Co-operation (CCC) is to help to create conditions in which the right educational opportunities are available to young Europeans whatever their background or level of academic accomplishment, and to facilitate their adjustment to changing political and social conditions. This entails in particular a greater rationalisation of the complex educational process. Attention is paid to all influences bearing on the acquisition of knowledge, from home television to advanced research; from the organisation of youth centres to the improvement of teacher training. The countries concerned will thereby be able to benefit from the experience of their neighbours in the planning and reform of structures, curricula and methods in all branches of education.

Since 1963 the CCC has been publishing, in English and French, a series of works of general interest entitled "Education in Europe", which record the results of expert studies and intergovernmental investigations conducted within the framework of its programme. A list of these publications will be found at the end of the volume.

Some of the volumes in this series have been published in French by Armand Colin of Paris and in English by Harraps of London.

These works are being supplemented by a series of "companion volumes" of a more specialised nature, including catalogues, handbooks, bibliographies etc., as well as selected reports of meetings and studies on more technical subjects. These publications, to which the present study belongs, are also listed at the end of the volume.

General Editor:

The Director of Education and of Cultural and Scientific Affairs, Council of Europe, Strasbourg (France).

---

1. For complete list, see back of cover.

CONTINUED EDUCATION

A study of the education
of young European school leavers
during their last years at school
and early years at work

by

E. W. SUDALE

1969

Council for Cultural Co-operation
Council of Europe
Strasbourg
1971

CONTENTS

INTRODUCTION

The origin of this study can be traced back to the Second Conference of European Ministers of Education (Hamburg 1961). Accepting a proposal by the British and Austrian Ministers, the Conference recommended that special study should be given to the question of the continued general education of young persons at appropriate schools and the prolongation of compulsory school attendance. This recommendation was subsequently reinforced by Resolution No. 3 of the Ministers' Third Conference (Rome 1962), which expressed the hope that continued education would be carefully studied in the Council of Europe by the Committee for General and Technical Education (EGT) and for Out-of-School Education (EES).

In preparation for the Rome Conference, the Austrian Ministry of Education had sent out a questionnaire to all States of the Council of Europe and signatories of the Cultural Convention. Its subject was "The setting up of educational facilities for young persons from 15-21 years of age who do not enter any institution leading to admission to universities". A preliminary comparative study (Min. Ed./Rome (62) 15), based on the replies and documentation received, was compiled by Mr. L. Wohlegemuth (Austria) and presented to the Rome Conference. This study revealed that not all respondent countries considered the extension of the period of compulsory schooling to be either the only or the most effective means of raising the educational standards of the young persons covered by the enquiry.

As a basis for the further study called for by the Rome Conference, a joint meeting of experts on technical and continued education (Rome 1964) agreed on the following definition :

"Continued education, in the sense used by the Third Conference of Ministers (Rome 1962) is the education, either on a compulsory or a voluntary basis, of young people who have completed or are about to complete compulsory education, but do not stay on for further full-time studies in secondary schools.

It can be given full-time or part-time under the supervision of the educational authorities and should be a bridge between basic education and taking up a job on the one hand, and adult education on the other."

Having accepted this definition, the Comittee for General and Technical Education organised a Seminar on Continued Education (Interlaken, June 1965) in co-operation with the Committee for Out-of-School Education, four of whose representatives attended as observers. Whilst fully appreciating that continued education could be interpreted in a much wider sense, the Seminar considered it wise and reasonable to restrict its concern to those young people covered by the EGT's definition, namely those who are about to complete or have completed their compulsory schooling and are at the junction of the different paths that lead to life, either by further schooling or by direct entry into practical life. By aiming at this more modest target, the Seminar was able to follow up the revised preliminary comparative study of Continued Education (CCC/EGT (64) 24) presented by Mr. Wohlegemuth to the EGT in July 1964. It was also able to produce valuable recommendations (Appendix B) on the scope, aims, organisation, methods and staffing of continued education for those young people who were its principal concern. In its final resolution, however, the Seminar fully recognised the existence of forms of continued education other than those which had been the main subject of its discussion, and recommended that they should be made the subject of a further study

This wider interpretation of continued education was given further emphasis by Dr. Th. Piffl Percevic, the Austrian Minister of Education, when presenting his report on Continued Education (Min.Ed./Vienna (65) 2) to the Fifth Conference of Ministers of Education (Vienna, 1965). He pointed out that it encompassed "not only facilities intended for school children (i.e. boys and girls who have not yet entered employment), but also establishments devoted to the education and further education of young persons who are in their first year or years of work and are undergoing paid industrial training as unskilled assistants, trainees or apprentices". He supported the recommendation of the Interlaken Seminar and expressed the willingness of his Ministry to prepare and convene, in co-operation with the Council of Europe, a seminar to study the question of continued education for young people who had already started work.

This generous offer by the Austrian Minister was accepted by the Conference which, in its Second Resolution, recommended that the study of the problems of continued education "be extended with particular reference to the further education associated with the training of apprentices and young workers, and to related problems of lifelong education". The Resolution

went on to stress "the importance of carrying out these studies having regard to the place of the individual in modern society with its economic demands, and to developments in the school systems of various countries, particularly in upper secondary education".

With this brief and with these antecedents, a second Seminar on Continued Education met at Baden (Austria) in February 1967. Bearing in mind that an earlier Council of Europe Seminar (Dusseldorf, March 1966) had explored new forms of vocational training for technical trades, the experts assembled at Baden concentrated their study on the general rather than the technical aspects of the continued education of young workers. In doing so, they set themselves to study not only the provision for young workers already receiving further education part-time, but also the situation and needs of those receiving none. As will be seen from its recommendations (Appendix C), this Seminar was able to establish a good deal of common ground with the early Seminar in Interlaken, to which, in the event, it proved genuinely complementary.

It is some measure of the importance attached by the European Ministers to the study of this sector of education that Resolution No. 2 of their Third (Vienna) Conference included a recommendation to the Council for Cultural Co-operation which envisaged the publication, in the Council of Europe's "Education in Europe" series, of a study of the problems of continued education, incorporating both the material assembled by the Austrian Ministry of Education and the deliberations of the Interlaken and Baden Seminars. In selecting an author for this study, the Council of Europe turned, understandably, to the Austrian Ministry, which, with the United Kingdom, had been co-sponsor of the original Hamburg resolution, and had played such a vital role in assembling the comparative material for successive Conferences and Seminars. When their first choice, Dr. Hans Nowotny, who had been closely associated, *ab initio*, with the project was unable, because of his transfer to other duties, to undertake this task, the EGT Committee turned to the other co-sponsor, the United Kingdom, which generously agreed that Mr. E. W. Sudale (H.M. Inspector of Schools), who had served as a member of the United Kingdom delegation to both the Interlaken and Baden Seminars, should be the author of the study.

The author's first task was to define continued education in a form which would correctly interpret the Ministers' intentions in recommending a study of the subject. Their initial Hamburg recommendation clearly stressed the aspect of longer compulsory schooling. Replies to the Wehlegemuth questionnaire, however, showed that several members considered this to be too narrow an interpretation, and that vocational and further education schools and colleges catering for young workers should also be included. Joined with this was a concern for those young people who, either because of the brevity of their compulsory schooling, or because of the inadequacy of provision for their post-school education, were not receiving any continued education. This broadened definition formed the basis of the complementary studies of the Interlaken and Baden Seminars, and was embodied in Resolution No. 2 of the Vienna Conference.

This study, then, is concerned with the education of what is a large proportion or even the majority of Europe's teenagers. Dependent on the educational systems of their respective countries, their ages range from 13 - 18. Making all the necessary allowances for national differences of economic, social and educational opportunity, they include a relatively high proportion of those of average or less than average ability. Some are in their last years of compulsory full-time attendance at either a primary or a secondary school. Others are in full-time vocational training, which may or may not include an element of continued general education. Others are at work, with some voluntary or compulsory continued education, either inside or outside working hours. Some, for a variety of economic or social reasons, are not gainfully employed at all, while many of those who are so employed are not receiving any continued education of an organised or formal kind.

These young people, then, their educational needs and aspirations, and the provision that is or should be made for them, are the subject of this study.

PART I

THE PUPIL, THE YOUNG WORKER AND SOCIETY

1. *The young people with whom this study is concerned*

(i) This study is concerned with the education of a large proportion, perhaps still a majority, of Europe's teenagers. Their ages range from 13 to 18, depending on the educational systems of their respective countries. Making the necessary allowances for national differences of economic, social and educational opportunity, they include a relatively high proportion who are of average or less than average ability. Few will have parents who themselves received more than the minimum of compulsory schooling and who are in occupations which required them to undertake further education and training. Some of these young people are in their last years of compulsory full-time attendance at upper primary, middle, lower technical or lower secondary schools. Others are undergoing full-time vocational training, which may or may not include an element of continued general education. Others are at work, but are receiving some voluntary or compulsory continued education,either within or outside working hours. Some, for a variety of economic or social reasons, are not gainfully employed at all, while many who are employed are not receiving any continued education of an organised or formal kind.

(ii) Amidst all their diversity of nationality, language and environment, they have one thing in common : they were born in the 1950s, and have grown up to adolescence in the 1960s ; barring catastrophe, they can expect to live well into the twenty-first century. Even in their short lives so far, the world has changed at an unprecedentedly rapid pace, and the effects of this change have been all-pervasive, reaching out from the industrial heartlands to the remotest areas of Western Europe, from the Arctic Circle to the toe of Italy. Although trends are not laws, and there is no absolute certainty that the pace of change will be sustained, it is a reasonable working hypothesis that it will, and that its effects on the living, learning and working conditions of these young Europeans, and the generations that will succeed them, will be even more profound and pervasive. If it was ever wise or possible to think of education as something which could stand apart from its economic and social context, it is not so now, when technical change is not only rendering obsolete much of the knowledge and skill which people have laboured to acquire and when social and demographic change has brought new status, new towns, new relationships.

2. *Post-war economic development*

(i) " Of all the driving forces of change in the present day, among the strongest are those which show up in economic form, those that bear upon the amount of money and other resources that is made available for the educational system, or upon the living the pupils in the schools are looking forward to being able to earn. [1]"

It is significant that the report in which this statement appeared was published in 1959, towards the end of a decade during which Europe, with a remarkable resurgence of vitality, had not only made good much of the disruption and destruction of the second world war, but had gone on to new and higher levels of economic activity, bringing improved standards of living to vast numbers of its people.

(ii) Three principal driving forces sustained this development :

— a high and continuing level of investment in the means of producing both goods and services ;

— increasing consumer demand made possible by a greater production of wealth, its more equitable distribution, and a reduction of unemployment ;

— an expansion of both European and world trade.

(iii) As the rising tempo of economic activity drew more unemployed and under-employed resources into productive use, shortages, especially of certain types of manpower, appeared in key sectors of the European economy. In contrast to the inter-war period, when many countries suffered from chronic or concealed unemployment, labour as a factor of production was now, as the boom continued, relatively scarce and expensive. This in turn reinforced the already substantial incentives for the more rapid application of scientific and technological discoveries to the productive process.

(iv) By the early 1960s, it had become apparent that in the process of reconstruction and expansion, the economics of many European countries were being profoundly re-shaped. Nowhere

---

1. *15 to 18*, Report of the Central Advisory Council for Education (England), H.M.S.O. London 1959, Vol. 1, p. 45.

was this more striking than in agriculture. Production grew, but productivity grew still faster, under the impact of higher demand, improved transport and a rate of investment well above the pre-war level. A survey of agriculture and economic growth in 10 European countries by OECD revealed that the number of tractors had grown from just over ¾ million in 1950 to more than 3 million in 1962. Fertilisers, pesticides, improvements in seed strains and in animal breeding had also played their part, reinforced by the growing trend towards "factory" methods in the production of poultry, eggs and meat. Changes in the size and nature of the farming unit were a corollary of these developments. Other basic industries were changing too. After a long sustained post-war boom, coal reached its peak as a source of power and propulsion, but the longer-term trend towards its replacement by oil, natural gas, hydro-electricity and nuclear power was not to be denied, so that by the early 1960s, it was already facing a shrinking future. In transport, rail systems were progressively pruned in face of competition from road and air transport; in all three, the trend towards greater speed, sophistication and bulk handling was marked.

(v) In manufacturing industry, the complexity and rapidity of technological change was the keynote. The spearhead was the electronics industry. Essentially a post-war development, its new devices for measurement, computing, and automatic transfer opened new dimensions for accelerating and controlling large-scale production. Hydro-carbon chemistry laid the foundation for the petro-chemical industry and for the flood of plastic and synthetic products (many of them substitutes for "natural" materials) which flowed from it. New metals, especially alloy-steels and aluminium came into large-scale production. The application of discovery and research to older industries like shipbuilding, steel, cotton and glass progressively transformed their processes of production. In face of the enormous demands of post-war re-building and the subsequent explosion of cities and industries, the construction and civil engineering industries were clearly moving into a new phase of large-scale mechanised operations.

(vi) With these changes came a rapid growth in the tertiary sector of economic activity, namely the personal and professional services. Some, like commerce, public administration and the law, throve on the increasing complexity of modern society; the social services were the economic expression of a more widespread concern for the individual and the improved capacity of society to provide for it (within this sector, education was perhaps the most rapidly growing industry); yet a third form of services, most notably entertainment and recreative provision of all kinds, was growing from small-scale to mass proportions to meet the buoyant demands of people with more leisure and more money to spend on it.

(vii) Not all the countries of Western Europe nor, indeed, all regions of individual countries, shared equally in the impact, benefits and upheavals of these developments. But in an age of increasing inter-dependence, and in a world grown smaller through what was virtually a second revolution in transport and communications, none remained unaffected, while the lives of many were transformed. After the slow growth or even semi-stagnancy of the twenties and the thirties, the speed of change was both exciting and disturbing, and there seemed little reason to expect the pace or profundity to diminish in the foreseeable future.

3. *Some consequences for employment*

(i) "Technical progress, having transferred men from the fields to the factory, is finally moving them from the factory towards liberal and commercial activities or, more precisely, into services concerned with human organisation and relationships[1]."

(ii) In these oft-quoted words, Louis Cros, with excusable prophetic licence, dramatically epitomised the impact of technical change on the nature and structure of employment in the second half of the 19th century. The move from field to factory was no new phenomenon in the more industrialised economies. What was startling, though, was the size and accelerating pace of the movement, spurred on by the twin stimuli of industrial growth and the rise in agricultural productivity. Industry needed more workers not only in its established centres but also in the small country towns, to which it was increasingly prepared to move its factories in a search of labour. Agriculture, with more machines, larger farm units and improved techniques, needed less. Thus, between 1955 and 1964, Italy's agricultural labour force shrank by one third, while those of France and the Federal Republic of Germany lost a quarter each. Between 1960 and 1967, the numbers employed in British agriculture, forestry and fishing, admittedly a smaller proportion of the total labour force than in most European countries, fell by a further 40 %. Large-scale transfers were also taking place in the Scandinavian countries and were expected to continue.

---

1. *L'explosion scolaire*, Louis Cros, C.V.I.P., Paris 1960, p. 19.

In Sweden, the Long-Term Economic Planning Committee, set up in 1965, forecast that employment in agriculture and forestry would fall by 5 % per annum up to 1970, involving an annual reduction of some 85,000 persons. Despite measures taken in many countries to control and modify these movements, it is clear that the underlying structural changes which have brought them about is by no means exhausted, and that large sections of the rural population, especially the young, will continue to face radically changed employment prospects.

(iii) For those who stay on the land, it means the learning of a whole new range of techniques. The operation, care and maintenance of farm machinery needs a different order of skill and knowledge from that required by the draught animals and hand tools which they replace. Larger-scale production in bigger units brings specialisation. Artificial foodstuffs for animals and fertilisers for crops, control of breeding and hygiene require knowledge, or at least understanding of their scientific bases. The whole process implies, too, the development of a new range of ancillary services offering employment markedly different from work on the traditional family farm. New methods in forestry, fishing and viticulture have wrought similar changes.

(iv) Motor transport, improved roads, air travel, extended leisure and higher incomes have combined to generate a vast boom in tourism, both intra-national and international, bringing new economic activity to once remote areas of mountain, lake and sea-coast, and creating new and non-traditional forms of employment Again, this trend is unlikely to be reversed.

(v) For those who continue to leave the land, some stay in their own region, but find employment in factories or in the service occupations in country towns, travelling daily from their native villages, or setting up new homes nearer their place of work. For others — and here the great migration from Southern Italy to the North and beyond is the most dramatic example — the transplantation is even more radical.

(vi) The impact of technical progress and rapid expansion on the pattern of employment in manufacturing industry is extremely complex. The key factor has been the emergence of a progressive shift, still far from complete in even the most highly developed Western European economies, from labour-intensive to capital-intensive production methods. The new industries at the spearhead of expansion, like electronics, plastics and petrochemicals tend to employ more fixed capital and less workers per unit of output than the older industries, while within these older industries themselves — iron and steel is a striking case — technological advances have worked to the same end. Although employment in manufacturing industry has risen in most countries, it has not risen as fast as production, as more and more firms substituted machinery and plant for labour. A similar trend can be observed in other industries which have traditionally been heavy employers of labour. In coal-mining, the post-war fuel famine brought a boom in demand, and a shortage of labour in all Europe's coal producing areas. A spectacular rise in wages stimulated mechanised mining, while the rise in prices induced coal-consumers both to economise in coal use and to look for substitutes like oil, natural gas and nuclear power. So rapid was the advance on all these fronts that, by the early 1960s, the mining labour force began to decline with increasing rapidity, with marked effect in Wales, Scotland, North Eastern England, the Ruhr, Southern Belgium and Lorraine.

(vii) Side by side with the changes in the relative labour demands of certain major industries came a significant and enduring shift in the nature of their demands. As less labour was needed at the actual point of production, the " non-manual " employment in offices, laboratories, drawing offices, work-study sections, maintenance, planning, service and sales departments increased. True, the demand for skilled manual workers rose too, but the sort of manual skills required were often of a different order of versatility from the craft expertise which traditional apprentice training, geared to smaller-scale production, had hitherto produced. As Professor Michael Postan noted " The skills of skilled employees were not necessarily greater than before. They were, however, frequently different ; more specialised, more departmentalised, more technologically informed, less practical and less rooted in tradition and routine..." [1].

(viii) This is not to argue that technological change had, by the mid-1960s, advanced so far as to bring about a major fall in the demand for unskilled, untrained industrial labour. The high level of employment enjoyed by most of Europe's industrial regions was a clear demonstration to the contrary. Nevertheless, periods of relative recession or of slowing down in the rate of growth revealed symptoms full of meaning for the future. At such times it was the unskilled workers, or those whose skill was specific to a contracting industry or occupation, and not readily transferable, who were more prone to temporary redundancy or even longer-term unemployment.

---

1. *An Economic History of Western Europe,* M.M. Postan, Methuen, London 1967.

(ix) Finally, in this foreshortened and highly selective review of the employment consequences of post-war economic change, one must examine some implications of what might be called the "services" or "tertiary" explosion. Employment statistics do not always reveal the full nature of this shift which, as we have seen, is not confined to "services" as traditionally defined, but is taking place within individual industries. In essence, it means that less and less people find employment which involves them physically in the production and transformation of materials, while more and more of them are concerned with the recording, interpretation and communication of information, with the rendering of services which require personal and social skills and qualities of intuition, extroversion and imagination. On the employment front alone, therefore, young people all over Europe face an economic future whose main possibilities have already emerged from the pattern of post-war economic development. The labour market demands more and more skilled workers, and less and less semi-skilled production workers and labourers. It asks for new skills in proliferating variety, while many of the old ones decline into obsolescence and redundancy. The very basis of acquisition of skills continues to change. Physical strength and manual dexterity are less important than a quantum of broad mechanical understanding, some acquaintance with the physical sciences, and a capacity both for interpretation and communication. Once acquired, moreover, a skill no longer guarantees life-long security and status, but may well have to be replaced, in mid-career, by a new one.

(x) These prospects present a particular challenge to the vast numbers of young Europeans who have hitherto only received the compulsory minimum of full-time schooling. Many of their traditional employments, success in which did not primarily depend on the sort of skills fostered in the schools, now call for a smaller, but better educated, more sophisticated and adaptable labour force. Agriculture and mining are striking examples of this trend, striking because of their pace of change and its dramatic impact, in terms of unemployment and economic stagnation, on the regions concerned. Less apparent but more pervasive is the slow but inexorable replacement of routine, semi-skilled factory labour by automated production processes.

(xi) As many traditional employment opportunities for the young school leaver decrease, others expand. But there is a marked difference between old and new. The former rarely required educational entry qualifications, or even a degree of literacy above that which could be acquired by completing the compulsory minimum of elementary education. Often too there was no need to leave one's home, family or local community when one left school and went to work. The new opportunities, on the other hand, require a general education which has at least some elements traditionally regarded as secondary. To an increasing extent, moreover, they are not available locally, so the young worker must train or work away from home, severing himself wholly or partly from his familiar environment. And yet, many of these young people have hitherto, because of their minimal education, been ill-prepared for such radical challenges.

(xii) Just as the new manpower needs of the first industrial revolution provided one of the main dynamics for the establishment of universal compulsory education in the 19th century, so what has often been called "the technological revolution" of the mid-20th century has again provided a driving force for educational reform, and faced the school systems with new dimensions and new opportunities. The extent of the challenge can be epitomised in quotations from two important reports, one national, one international.

(xiii) "The future pattern of employment in this country will require a much larger pool of talent than is at present available; ... at least a substantial proportion of the 'average' and 'below average' pupils are sufficiently educable to supply that talent. The need is not only for more skilled workers to fill existing jobs, but also for a generally better educated labour force to meet new demands.[1]"

(xiv) "People now live and work in an increasingly sophisticated urban society and industrial system. They must be ready to participate in an alert and competent manner. Their educational preparation must be more adequate to assume greater individual responsibilities and participate in the management and operation of production or service units in which decision-making processes are more crucial and take more time than actual manual performance of duties. They not only have to follow the precepts of the past, but must be ready to discriminate among and accept those of the future. The readiness to change attitudes and ideas becomes more important than even the performance of specific manual duties. Education has to cultivate the habits and attitudes of learning to dispose people to the processes of continuous learning through a lifetime.[2]"

---

1. "Half our Future", Report of the Central Advisory Council for Education (England), H.M.S.O., London 1963, p. 5.
2. "Manpower Aspects of Automation and Technical Change". Final report OECD, Paris 1966, pp. 101-2.

4. *Some post-war social changes*

(i) From the vast complex of post-war social changes, it is only possible to summarise those which have particular importance in shaping the needs, aspirations and attitudes to continued education of the young people with whom this study is concerned.

(ii) *Family influence*

Speaking at the Baden Seminar, Dr. H. Nowotny (Austria) drew attention to the potent influence on young people of the attitudes of their parents and of the social group to which they belong, and its crucial effect on their demand for and response to opportunities for extended education and training. Which particular aspects of social change, then, have particular relevance to the family environment of the young school leaver ? There is no doubt that many households, traditionally regarded as " working class ", from which the great majority of young school leavers come, have had some share in the general post-war rise in material standards of living. So much is manifest from statistics of money wages, real wages and of consumption. Equally important for working-class living standards has been the relatively high and sustained level of employment achieved by many European countries, especially since 1960, when unemployment has rarely exceeded 2.5 % of the working population. The increased range of social security benefits and payments has often brought a significant transfer of income in favour of the lower income groups. Family and child allowances, whether in the form of direct payments or tax relief, the general progress towards the abolition of school fees, and the increasing public provision of school books and subsidised school transport have combined to blunt the edge of the economic incentive which formerly prompted many working class parents to expect their children to leave school and enter employment at the earliest possible moment. It should be stressed, however, that these developments represent only a general trend, whose extent varies not only from country to country, but also from one section of the working class to another within individual countries. There are still many poor households whose poverty may stem less from the lack of a minimum income than from social incompetence or unavoidable misfortune. Family allowances may not necessarily be spent on the children for whose benefit they are intended. Moreover, even where education is free and publicly provided "there is still something which a family has to 'afford' when it sends its children to school, especially when the legal compulsion to do so has expired" [1]. This is especially true of adolescents who need adult quantities and standards of food and clothing, and have tastes in entertainment which are expensive to satisfy.

Even in the most economically developed countries, moreover, there are sections of the population which have not fully shared in the relative affluence of the post-war years. A high average level of employment may yet co-exist with serious localised unemployment, especially in areas whose traditional industries have suddenly declined. Changes in agriculture have often led to a degree of unemployment or underemployment not fully revealed by manpower statistics. The millions of workers who have migrated to other regions or other countries may well have found employment, but only at the cost of divided families, or poor living conditions in their new situations. The increasing concentration of Europe's population in expanding conurbations has often brought serious shortages of the type of rented housing needed by the working-class family. The American phenomenon of "inner-ring decay" is not without its European counterparts, and shanty-towns are not unknown, even though their hovels may boast a television set or a refrigerator.

This co-existence of poverty and affluence is no new phenomenon, nor does it nullify the general trend of improvement. In the context of this study, however, it is as well to remind ourselves that although many working class families can now afford a longer education and training for their children, there are many for whom, if it is possible at all, it is so at the cost of real financial sacrifice.

Much, therefore, depends on whether parents consider the sacrifice, be it large or small, worthwhile. For them to do so they must be convinced that the longer education and training which, for the most part, they did not themselves receive will be of greater benefit to their children than early employment in a dead-end job. Two major factors — their evaluation of the education given, and their vocational aspirations for their children — will influence their decision.

To parents whose own schooling was minimal, the contemporary school system is often unfamiliar and sometimes forbidding. Many are aware that changes are taking place, and generally look on them with favour. They value the more interesting and varied curricula and are impressed by the improvements in school building. They are usually aware of the better opportunities open to those who remain longer at school and gain some recognised qualification. But their information

1. Crowther Report, op. cit., Vol. 1, p. 46.

rarely goes further than this, and there are often major psychological obstacles in their way if they seek to extend it. Consciousness of their own social and educational shortcomings often leads to a diffidence in seeking closer contact with their children's teachers which middle class parents do not share. The schools themselves are not always conscious of these difficulties, and may mistake diffidence for lack of interest. There are parents, of course, who are not interested, and are content to delegate the whole task of education to the school. In some cases, this indifference may well harden into hostility if what the schools provide, as seen through the eyes of their children, seems boring or irrelevant. Influenced by their own educational experience, they will tend to attach considerable importance to what they consider the basic skills of reading, writing, spelling, arithmetic and speaking "properly", and rather less to those parts of the curriculum which are not obviously utilitarian.

Their vocational aspirations for their children are inevitably coloured by their own experience. Careful or ambitious parents will think in terms of jobs for their sons which offer security, the chance to learn a marketable skill, and prospects of future advancement. For their daughters employment may be seen as a temporary prelude to courtship and marriage and be judged by the extent to which it serves to promote this end by enabling them to meet a variety of people and maintain acceptable standards of dress, appearance and social intercourse. In so far as longer education appears to improve their children's prospects of getting this type of employment, such parents will favour it. Hence the abiding popularity of lower technical or vocational schools in certain European countries, and the parental support for the introduction of vocationally-biased studies into lower secondary education.

Other working-class parents will be less ambitious for their children, being content to see them follow the occupations which are traditional to their own social class or neighbourhood. In circumstances of full employment, they may well weigh the fact that much unskilled or semi-skilled work is well paid and, in the short run, relatively secure, against the financial disadvantages of longer education and training. For these parents, their children's contentment at school and at work may well seem more important than their long-term prospects. The experience of older brothers and sisters, of other relatives and friends, can also sway their choice.

In short, the schools cannot look to the economically under-privileged and culturally impoverished homes, from which many continued education pupils come, to provide the level of support and understanding which they have been accustomed to receive from the parents in more fortunate economic or social circumstances. Indeed they may often have to face indifferent or even hostile family attitudes arising from the gap between the cultural and vocational outlook of school and home, a gap which, in the short run, may widen with the increasing contrast between the educational and employment experience of past and present generations.

(iii) *The attitudes of young people*

Many currents of post-war social change have influenced young people's attitudes to school.

The first, itself the product of improved health services and higher living standards, is earlier physical maturation. Over a long period of years, puberty in girls has been beginning earlier in most Western countries, and there is no doubt that boys are also maturing earlier. At the same time, the lengthening of school life has meant that an increasing part of this stage of physical maturation will take place while they are at school, and with it the restiveness, uncertainty and emotional insecurity which so often accompany this watershed of growth.

At the same time, there has been some weakening of the constraints and sanctions which have traditionally — for better or worse — regulated the pace at which young people progress toward freedom to make their own decisions and to regulate their own destinies. One facet of this — the limited competence of family guidance in educational and vocational choice — has already been noted. But it goes much further. In many parts of Europe, and especially in its great conurbations, profound economic and social changes have eroded the regulatory framework of home, family, village or neighbourhood. Young people see more of the wider world and its ways, if not at first hand, then through the selective eye of the mass media. They are more free to choose and are more aware of the range of choice at their disposal. The fact that many have more money to spend has not been lost on the commercial interests, and the teenage consumer has, within a mere matter of a decade, become an important sector of the consumer society.

These diverse and powerful pressures are at work on all young people, creating a challenge to all types of secondary school. But, for children who lack strong educational motivation and countervailing parental encouragement, they will be hard to overcome. The high post-war level of economic activity has meant that many young school leavers without educational qualifications have had little difficulty in finding unskilled but relatively highly paid employment. The fact that

these jobs carried little prospect of training or future advancement weighed less than the immediate attractions of release from school to the apparent freedom of the adult world, with more money of their own to spend and no lack of things to buy with it. Girls are especially open to the alternative attractions of working life. Earlier physical maturity and the continuing trend towards earlier marriage have combined to make many of them regard employment as a limited interlude on the way to courtship and marriage, to which they feel extended education and training are irrelevant, despite the increasing possibility of their continuing to work after marriage or returning to it when their children have grown up.

If, at the most unstable period of their adolescence, when leaving school seems to offer an escape to the attractive realities of the grown-up world, young people find little satisfaction in the education and training which they are offered, then the schools' task becomes even more difficult. For those who, whether by reason of linguistic inadequacy, disadvantages of social and physical environment, or lower ability have failed, even from their elementary school days, to reach the often rigid standards of attainment set by the schools, the sense of failure may result in a mood of hopelessness and frustration. By the time they approach the end of their compulsory schooling, they are only anxious to be rid of education as they know it. In this state of mind a job — any job — may seem preferable to staying at school. Many of them find solace in the world of myths, slogans, idols and stereotypes created by the radio, television and the cinema, a world into which, unlike many adults, they have been born and which has been an integral factor in shaping their attitudes and values.

(iv) *Work and leisure*

An important by-product of post-war economic development has been the change in the extent and significance of young people's leisure time. Sometimes, and rather misleadingly, this is referred to as the "problem" of leisure, and discussions about it are based on broad generalisations about the shortening of hours of work, greater spending-power, and the proliferation of attractive leisure-time pursuits.

These generalisations are substantially, if not universally, true for many young people in Western Europe and are likely to become more so if present trends continue.

It is, nevertheless, dangerously easy for adults, impressed by the apparent differences between the rigours of their own youth and the greater freedom of the modern young, to overstate the change. While children at school enjoy greater leisure, often because the need for them as part-time labour is diminishing, there is a general movement in many countries towards a longer school-day or school year. To this must be added other, and less obvious extensions. As more young people enter secondary education, they spend more time in homework outside school hours. The progressive disappearance of the parochial or neighbourhood school, and its replacement, in rural areas or in traffic-congested towns, by a larger centralised institution, often means increased travelling time for the pupils. Although the young worker's working day and working week are shrinking, he too may have to travel further to his job or to the day or evening classes which are an increasingly widespread feature of continued education.

It is also easy to exaggerate the affluence of young people in their last years at school or their first years at work. Many older school children do part-time jobs from personal or family necessity. Despite the relatively high rates of pay for juvenile labour in some industrial areas, there are many young workers, especially girls, who still work long hours in poorly paid jobs, while others, as apprentices or trainees, receive low wages during their training period. And then there are the young unemployed, those for whom either jobs do not exist, or are only seasonally available in their native country, region or area. Where economic change, whether in industry or agriculture, has produced a rapid decline in the demand for young unskilled labour, their poverty is real indeed, and may well be partly concealed by inadequate or outdated statistics. As Mr. Caron (France) reminded the Baden Seminar, "For all the extension of certain fashions of dress and the advent of a civilisation where all are 'peers' in the same age-group, the fact is that in all countries there exists a poverty-stricken, under-privileged section of youth."

With these substantial reservations, however, it is reasonable to proceed on the general hypothesis that the leisure time of many young people and their means to enjoy it are increasing and will continue to do so.

It is equally important to recognise the changes that are coming about in young people's views of the relative significance of work and leisure in their lives. For many young workers now, and probably for far more in the future, work is not an end in itself, self-sufficient and satisfying, but rather is it means to buying the possibilities for leisure. We have to challenge the assumption,

not that work is necessary to man, but that it is his chief means to self-realisation. The connection between work and the standard of living is basically inescapable, but many of the young people with whom this study is concerned will decreasingly regard the shorter hours which they spend at work as the most significant or important part of their lives.

Many adults, including educationists, have been concerned at the ways in which young people are spending their increased leisure and money. They have been disturbed by the rise in juvenile delinquency, by the more garish and strident manifestations of a commercialised teenage culture, by the disinterest or even contempt of many young people for the efforts of officially sponsored or socially approved forms of youth activity. They have been puzzled by the oft-repeated complaints of boredom even in circumstances which seemed rich with possibilities for a "proper" use of leisure.

While much of this concern may have its roots in the gap between the generations, and in a failure to appreciate the variety of healthy uses to which many young people put their leisure, it is often well-founded for the minimally educated and socially under-privileged youngsters for whom the street corner, the cafe, the coffee-bar, the cinema and the television set too often represent the limits of their leisure-time horizon. While the local youth club, if there is one, may attract some of them for a time, ignorance, indifference and suspicion, often bred by a growing realisation of their limited personal and social competence outside their own immediate friendship groups, prompt them to seek commercialised entertainment with its more glamorous image and expert salesmanship, where they are treated as adults capable of choosing and buying their own recreation, having their own rights as paying-customers regardless of social or educational distinctions.

5. *Some consequences of economic and social change for continued education*

(i) To sustain the momentum of economic change and to fructify its social consequences, modern society needs better educated citizens. The re-shaping of old industries and the emergence of new ones have profoundly changed the nature and incidence of the demand for labour at all levels. New knowledge, new skills and new attitudes are required as much by the ordinary worker and citizen as by the social and educational elite.

(ii) Greater economic potential, together with improved employment, income, and social welfare make it increasingly possible for more young people to receive education and training of longer duration and of wider range and content. But it is only a possibility. For it to be fully realised requires a progressive transformation in the attitudes and expectations both of the young people themselves and of their parents, many of whom have hitherto received only the minimum of education and training.

(iii) For lower secondary and vocational education, these developments imply radical changes in structure and content. Structurally, they must accommodate a school population which is not only larger, older and physically more mature, but which may be socially and intellectually more diverse than hitherto. They must be so organised as to enable both boys and girls to receive an education which is appropriate to their ages, abilities, aptitudes and interests. Among their pupils will be those who are capable of further progress to higher secondary and technical education, and it is vital that they should be prepared and encouraged to do so. And yet there will be many for whom this stage of education will be either a preliminary to direct entry into employment, or a part-time accompaniment of their early years at work. For all, appropriate educational and vocational guidance will be vital.

(iv) Changes in curriculum are equally necessary. The traditional primary skills of reading, writing and calculation will need adaptation, if not transformation, in face of mass communications and "outside" educative influences, to say nothing of the linguistic diversity and increased maturity of the pupils. Social competence and vocational interest (especially for the increasing numbers who will work in the expanding tertiary sector) alike demand new approaches to spoken language as a tool of effective communication which surmounts social and educational differences. Some introduction to mathematics, to the physical sciences and to technology will be necessary for all young citizens, and not just for those who will be employed in industry. In a more mobile, pluralistic and interdependent society, the social and civic education of its emergent citizens takes on new dimensions and a new urgency. New patterns and possibilities for leisure will need to be reflected in the provision for aesthetic, physical and other compensatory or re-creative education. In a more permissive society, religious and moral education needs a new content and a new approach, especially when many young people may face an early uprooting from family environment and local community alike as they leave home to follow their employment.

The traditional curricula of lower vocational education face an equally radical challenge. Their role is no longer to prepare young people, mainly through training in manipulative skills,

for a specific manual craft which they can expect to practise for the rest of their working lives. In its place will come a much broader preparation not only for their present or immediately prospective jobs, but for the further re-education and training which many of them will inevitably need as technological change continues. This in turn implies a growing area which is common to both the so-called "general" and "vocational" curricula for the continued education pupil.

(v) Implicit in these changes is the central thesis that the continued education of the ordinary pupil shall be so re-structured and reconstituted that, while gaining responsiveness to the needs of modern society, it shall not lose its immediacy and relevance in the eyes of the young people for whom it is intended. A broader and extended general education for all pupils does not necessarily mean a watered-down version of what has been hitherto provided for a socially privileged elite already conditioned by their family background to embrace its values and methods. Such an approach could well result in continued education's becoming little more than a prolongation of the conflict between pupils who find it alien and irrelevant to their own values and way of life, and teachers who are discouraged and frustrated by their apparent failure to communicate. On the other hand, direct and early preparation for a specific job, often successful in re-awakening the ordinary pupil's energies and interests through its practical approach, may be equally inappropriate. In the interests both of society, and of the long-term interests of the pupils themselves, of which they may not yet be aware, this narrow focus of vocational interest will have to be broadened to include subject matter which, being theoretical, may at once tax the ability of the ordinary boy and girl and yet seem remote from the working life which they have been conditioned to expect.

PART II

CONTINUED EDUCATION AT SCHOOL

CHAPTER I

POST-WAR REFORMS

1. *Developments in the structure of lower secondary education*

(i) *The extension of the period of schooling*

In the post-war period, and especially since the mid-1950s, virtually all member States of the Council of Europe have been engaged in making provision for the extension of the period of full-time schooling (see Table I). This has been based on the growing and increasingly wide-spread conviction that the economic and social conditions of the modern world demand that as many children as possible should be provided with a more substantial base of education from which they can variously move forward to employment, to further education and training, and to adult life.

The educational reforms undertaken by most member States envisage an extension of compulsory schooling for all young people. Within this broad consensus, however, two main schools of thought may be discovered, which differ not so much in their ultimate aims as on questions of approach and timing. The first envisages a relatively early introduction of extension by compulsion, the second by the progressive stimulation of voluntary extension beyond a relatively limited compulsory minimum period. Thus, since 1947, the United Kingdom, Sweden, France, Austria, Luxembourg, Iceland, a number of cantons in Switzerland, the majority of States in the Federal Republic of Germany and of local authorities in Norway have, at the time of writing, extended the compulsory period by one or two years beyond the age of 14. On the other hand, Belgium, Ireland, Denmark and the Netherlands have placed their main short-term emphasis on encouraging as many children as possible to continue full time schooling on a voluntary basis beyond age 14, while envisaging an ultimate extension of the compulsory period.

Whether they have preferred compulsory or voluntary extension, all countries have experienced a substantial rise both in the absolute numbers and in the proportion of young people remaining in full time schooling for one or two years after age 14. It is worth noting that certain countries (Denmark, Belgium and the Netherlands are notable examples) which have concentrated on voluntary extension have been relatively successful in persuading a high proportion of their young people to complete more than one additional voluntary year of full time schooling, while retaining a minimum compulsory age of 14.

For continued education, however, the voluntary/compulsory distinction is important. The voluntary approach aims to enable all children who, whether of their own or their parents' volition wish to stay longer at school, to do so. But it allows those who do not wish to stay on, to leave, and in all the countries which have preferred this method, a certain proportion of the age group does not, in effect, continue in full time schooling beyond age 14. The compulsory method, on the other hand, lengthens the schooling of the whole age group. Although it opens the doors of opportunity for many children to whom, but for compulsion, they would have been closed, it also keeps in school a proportion of pupils who would not have stayed. And it is these latter children who, for many educators, present the nub of the problem of continued education.

(ii) *Changes in the structure of lower secondary education*

This extension of schooling had considerable implications for school structures which, in most countries, were still of the vertical or parallel type. A long grammar school type secondary education for a selected and more or less elite minority coexisted with a short terminal and general or vocational education for the majority. These clear distinctions had long been blurred by the emergence of a variety of "intermediate" schools which, while falling short of recognition as genuine secondary schools, had yet provided opportunities for the able child from humble circumstances to proceed beyond the confines of the primary route. By adding extra voluntary years to the primary school (e.g. the *cours complémentaires* in France) or by organising distinct "intermediate" schools (e.g. the Austrian *Hauptschule*, the *Mittel* - or *Realschule* in some States of the Federal Republic of Germany, the "central" schools in England, the higher primary schools (*u.l.o.* and *m.o.l.o.*) in the Netherlands), a flow of recruits to the middle ranks of the professions

and public services had long been secured. Their curricula had reached beyond the traditional primary regime of instruction in the mother tongue, arithmetic, national history and such other subjects as were considered useful for the future worker, to embrace studies which often paralleled those of the first years of the long secondary course. A variety of forms of lower vocational and technical schooling had also been evolved as explicit alternatives, or complements to the upper stages of primary education (e.g. the secondary technical school in England, the *scuola d'avviamento professionale* in Italy, the *lagere technische* school in the Netherlands, and the *écoles d'enseignement professionel* in Belgium) whose task was to prepare their pupils for apprenticeship or entry into similar forms of skilled industrial or commercial employment.

Even with these "intermediate" modifications, however, such a structure was seen to be increasingly inadequate to provide a full range of educational opportunity for all children to develop their talents.

This situation produced two broad categories of response :

(*a*) The retention of a hierarchy of parallel but separate types of post-elementary education, with improved possibilities for transfer between them in the light of the pupil's emergent abilities and aptitudes, (e.g. the reformed post-primary structures in Belgium and the Netherlands).

(*b*) The construction of a *comprehensive* or unified lower secondary school intended to provide for all, or the great majority of children in the lower secondary age group in one institution or under one roof (e.g. the "unitary" school in Sweden, the middle school in Italy, the college of secondary education in France).

(iii) *The guidance period*

An important aim of these reforms was progressively to reduce premature selection and specialisation. Post-war psycho-pedagogical research had indicated that the age of 10 to 12 was too early for children to be allocated to different school routes which, in practice, narrowly restricted their future choice of educational and vocational opportunity at a time when their interests and aptitudes were by no means fully apparent. On social grounds this selection was criticised because of its tendency to reflect and perpetuate the class divisions of society by allowing few effective chances of subsequent transfer, and therefore permitting the waste of the emergent talents of many children. On economic grounds, it was felt that vocational specialisation on a rudimentary basis of elementary education was altogether premature and unlikely to produce the better educated labour force demanded by post-war technological change.

Increasingly, therefore, post-primary and lower secondary education was seen as a period of diagnosis and guidance and less as a terminal prelude to entry into employment [1]. The lengthening of the post-elementary school period made it increasingly possible to realise this changed conception by giving more time for talents to develop and for aspirations to change.

(iv) *The increased size of schools*

The higher proportion of children enrolled in post-primary or lower secondary education, the lengthening of school life, and the need to broaden the range of educational opportunities available to each child all pointed in the direction of larger school units. The typical pre-war primary school served all but a small minority of the children of its neighbourhood for the duration of their compulsory schooling. In the rural areas this meant that the post-11 age group were often in small, undifferentiated units, offering severely limited accommodation, equipment and specialist teaching. Schools in urban areas, though serving greater concentrations of school population, were still geared to providing the restricted subject range of the traditional primary curriculum. The co-existence of State and denominational schools was also a source of fragmentation in countries or areas of mixed religion.

The pace at which these larger schools came into being varied from country to country according to their need to build new, or to replace existing, schools, the nature of the reforms of their post-primary school systems, and the demand for school places arising from higher birthrates and the extension of schooling to a higher proportion of young people for a longer period.

1. For further details see Y. Roger, *The Observation and Guidance Period*, Strasbourg 1967 (Education in Europe Series, No. 7).

The trend towards larger units has been most marked in those countries which have chosen some form of common school for all or the great majority of children at the lower secondary stage (e.g. the unitary school in Scandinavia, the comprehensive school in certain areas of England and Wales, the middle school in Italy, and the college of secondary education in France). Though less marked in countries which have retained a modified system of parallel routes (e.g. the Federal Republic of Germany, Austria, Belgium and the Netherlands), the trend is nevertheless apparent, especially where formerly separate routes have been combined in one school. In many rural areas of Europe, moreover, the small village, parochial or communal school, is progressively being replaced by the larger centralised institution drawing its pupils from a much larger catchment area.

2. *Some consequences for continued education*

(i) *New pupils, new needs*

These developments have brought longer schooling to a much wider and more representative cross section of young people than ever before. Compared with their predecessors, they are older, physically more mature and likely to have more adult attitudes and expectations. Among the newcomers, there will almost inevitably be a very wide range of social background, ability, attainment, motivation and attitudes to schooling. The higher the proportion of the age group brought into longer schooling (the whole, where extension is compulsory), the heavier will be the incidence of less gifted pupils and of those less immediately capable, for a variety of reasons, of profiting from a longer education conceived on traditional lines. Many of these will be the subjects of continued education.

(ii) *Types of establishment providing for continued education*

As a result of the post-war reforms of school structures, considerable changes have come about, and are still occurring, in the environment in which these continued education pupils spend their final year of compulsory full time schooling.

In the report of the Austrian Ministry of Education to the Fifth Conference of European Ministers of Education (Vienna 1965), two broad categories of establishment intended to provide for continued education pupils in their last years of full time schooling were distinguished :

(a) *Homogeneous (or uniform) classes or schools*

These are separate classes or schools specifically designed for pupils in their last years of compulsory schooling, and intended to be an immediate preliminary to entry into full time employment. They tend to offer a broadly uniform curriculum, based on the estimated common needs of this category of pupil. Little or no choice of subjects is possible and, since pupils are supposed to be broadly similar in ability, there is no "streaming".

(b) *Heterogeneous (or multilateral) classes or schools*

Here there are no separate classes or schools specially created for continued education pupils, since the organisation of lower secondary education is designed to channel all pupils into streams or courses according to their abilities and aptitudes. This kind of secondary education can be obtained in one and the same institution (a multilateral, unitary or comprehensive school), where pupils follow a more or less common curriculum for the early part of the lower secondary stage ; it can also be provided in different institutions which have a broadly common curriculum for the first and, in some cases, for one or two subsequent years. Although the various courses or lines of study differ in subject content and level of subject matter, the intention is to leave the pupil with as wide a choice as possible for as long as possible, and to facilitate transfer between courses or lines.

Table II, based on these categories, amplified and modified to take account of developments since 1965, summarises the variety of school situations in which continued education pupils may find themselves.

Useful as the structural distinction between types (*a*) and (*b*) may be, its importance in determining the situation which the pupil actually faces in the classroom can easily be over-stressed. Schools of type (*a*) are, it is true, "residual" in the sense that they cater for those pupils who remain when others of higher ability or attainment in the same age group have already entered or

transferred to other schools. The fact that they are, in this sense, the "left-overs" may well have important effects on pupils' and teachers' morale, and on society's attitudes to this type of schooling. These, in turn, may be counterbalanced by the fact that, having a relatively homogeneous group of pupils to cater for, both the school authorities and the teachers can provide more specifically and single mindedly for their needs than if they were in an institution of type (*b*) with a range of curriculum and teaching which is necessarily wider because it must cater for a greater diversity of aims, abilities and interests.

It may be contended, however, that the homogeneity of pupils in type (*a*) derives more from their location in the school system than from their real needs as young people. Even a "residual" group may contain a diversity of abilities, aptitudes and stages of physical and mental maturity which ought to be matched by a variety of subjects and methods of teaching. Even within schools of type (*b*), it is possible to find "residual" groups, with an equally wide range of potential talent who have nevertheless chosen to quit school at the earliest possible moment for the economic and social reasons referred to in Part I. In practice, their status within the school may well differ very little from their peers in type (*a*), while the curriculum prescribed for them may be equally inflexible especially in its concluding stages. Where they are housed, as they still are in some school systems of type (*b*), in separate buildings and taught by a separate body of teachers, the practical difference in the nature of the education they receive may well be clearer in structural terms than it is in reality. While the pupil of modest social origins but with good potential can often have a wider range of opportunity for improvement and transfer in type (*b*) schools, than would be open to him in type (*a*), the needs of the less able and socially handicapped pupil, on the other hand, may be less well served in a more heterogeneous institution unless they are given the same degree of priority and attention as they receive in a separate institution of type (*a*).

An important driving force behind the reform of European school systems has been the need to open the doors of secondary education to a wider proportion of each nation's children in order to meet the economy's demands for a more highly educated, qualified and skilled labour force. The resources of hitherto underprivileged talent awaiting these opportunities have already been demonstrated by the increasing flow of pupils into lower secondary education who have not only faced up to the demands made upon them but have also successfully surmounted the traditional examination hurdles on the way to upper secondary and higher education. Schools and teachers accustomed to a smaller and more favourably conditioned clientele have, though not without difficulty, accommodated their traditional curricula and methods to this broader band of relatively able recruits. It is understandable that both they and the society which sustains them have, in part at least, judged their achievements in terms of their pupils' success in courses and examinations qualifying them for entry into higher education and to the professions.

The concern of successive Conferences of European Ministers of Education with the ability of school systems to meet, with equal success, the needs of those young people which could not so readily be served by admitting them to the traditional regimes of secondary education, has underlined the problem of what the Newson Report [1] called "the other half". Those pupils, it was appreciated, faced secondary education with considerable and often unfamiliar problems. And yet, if only on the grounds of economic and social progress, any reform of secondary education would be incomplete if it failed to give due — many would say equal — attention to these problems.

As the Table and the descriptive Appendix to Part II show, member countries have certainly been aware of the special needs of the continued education pupil, and are in process of endeavouring to meet them in ways which are inevitably as diverse as their economic resources, their social and educational philosophies, their school structures, and their existing stock of buildings and teachers. Some have chosen to set up classes or institutions of a new type within the framework of their traditional school systems, while others, in re-shaping their secondary school systems, have, in varying degrees, endeavoured to integrate the education of these pupils with that of the lower secondary age group as a whole.

Yet, as the conclusions reached by the Interlaken Seminar demonstrated, the needs of the continued education pupil transcend this structural diversity, important as it may be in determining how these needs are met. What matters for the pupil is the sort of programme which his school has to offer, the way in which it is taught, and its relevance to his abilities and aspirations. It is to these questions which, following the example of the delegates at Interlaken, we shall now turn.

---

1. Op. cit.

TABLE I

Duration of compulsory schooling in 1968, and planned extensions

General remarks : Compulsory schooling for less than eight years is now exceptional in Europe. A nine-year compulsory period for all children is already a reality in some countries and is either envisaged for the near future or has been agreed in principle in most others. Voluntary extension for a 9th or 10th year is atively encouraged in some countries ; in the United Kingdom there is a compulsory ten-year period from the age of five.

Country	Duration of compulsory schooling for 1968	Extension of compulsory schooling	Non-compulsory schooling
Austria	9 years (6 to 15)		
Belgium	8 years (6 to 14)	To 9 and ultimately 10 years envisaged by the Education Act of 1964	Over 80 % complete a voluntary 9th year
Denmark	7 years (7 to 14)	Extension to 9 years being planned	Municipalities are required to provide a voluntary 8th year when more than 10 pupils apply for it. Approximately 90 % of children complete an 8th year
France	10 years (6 to 16)	It is envisaged that the Decree of 6 January 1959 which provided for the introduction of a 10-year period as from 1 January 1967 will be fully implemented by 1972	
Federal Republic of Germany	9 years (6 to 15) in 10 of the 11 States + 3 years part-time	To 9 years in the 11th State in 1968-69	
Greece	6 years (6 to 12)	The 1964 Act envisaged progressive extension to 8 years (6-14)	
Iceland	8 years (7 to 15)		
Ireland	8 years (6 to 14)	It is intended to extend the compulsory period to 9 years (6 to 15) in 1970	Full-time attendance by ( ) % of all children between 14 and 15 and by ( ) % of children between 15 and 16 years of age
Italy	8 years (6 to 14)	The Italian Constitution (27 January 1947) provides for the extension of compulsory schooling beyond 14 years of age	
Luxembourg	9 years + 2 years part-time		
Netherlands	8 years (6 or 7 to 14 or 15)	The Bill of February 1967 envisages extension to 9 years	Voluntary extension encouraged for a 9th year
Norway	9 years (7 to 16) in municipalities covering over half the population. 7 or 8 years in the remainder	Compulsory education to be extended to 9 years for the whole country by 1972	A 10th voluntary year may be added
Spain	8 years (6 to 14)		
Sweden	9 years (7 to 16)		Particular efforts are made to encourage voluntary continuation of studies at upper secondary, continuation schools, and technical and vocational training establishments
Switzerland	7 to 9 years (6 or 7 to 14 or 16), ending at 15 in most cantons	A general trend towards extension to 8 or 9 years	
Turkey	8 years (6 to 14) with a minimum of 5 years.		Elementary and continuation courses may be attended voluntarily after the terminal age of compulsory schooling
United Kingdom	10 years (5 to 15) since 1947	To be extended to 11 years (5 to 16) in 1971-72	Voluntary extension to at least 16 is encouraged. 30 % of the age-group do so

TABLE II

Country	Type (*a*) Homogeneous (uniform) classes or schools	Type (*b*) Heterogeneous or multilateral classes or schools
Austria	The Polytechnic Year (9th) for those pupils not continuing their secondary or vocational education.	
Belgium		Pupils complete compulsory schooling in either (i) an intermediate school, or (ii) a technical or vocational school. Voluntary extension possible and encouraged.
Denmark		Pupils complete compulsory schooling (7th year) in the common main school (*Folkeskole*), which may or may not be divided into general or vocational sections. Voluntary extension for 8th, 9th and 10th years possible and encouraged.
France		Pupils complete compulsory schooling in either : (i) the general secondary section, or (ii) the terminal practical section } of the lower secondary stage. (iii) may form part of a multilateral College of Secondary Education or be annexed to a College of Technical Education, a College of General Education or, rarely, a Grammar School. Until 1972, it may take the form of part-time attendance (2 days per week) education and training plus practical experience of employment.
Federal Republic of Germany	The majority of pupils complete compulsory schooling in the 9th year of the senior main school (*Hauptschule*), which caters for children who have not transferred to the grammar school or to intermediate secondary school (*Realschule*).	In some States (e.g. Hesse) the main and intermediate schools are unified. Comprehensive schools established in West Berlin, Bremen, Hamburg and Hesse.
Greece	Pupils complete compulsory schooling in the 6th year of elementary schools.	
Ireland	Pupils who do not transfer at age 12 to general secondary schools or at 13 to secondary vocational schools remain in primary schools, or in the "secondary tops" of primary schools.	Voluntary extension into the second (9th) year of the secondary vocational school course encouraged. Technical and continuation education provided in this type of school.
Italy		Pupils complete compulsory schooling (8th year) in the 3rd year of the common middle school (*scuola media*).
Luxembourg	Pupils who do not proceed at age 12 to general secondary education, or at age 13 to vocational education, remain in primary school continuation classes (*classes complémentaires*).	
Netherlands	Pupils of least ability proceed at age 12 + to individual vocational education (*i. t. o.*), which may be organised in separate schools. Voluntary extension possible and encouraged.	Pupils complete compulsory schooling (8th year) in either : (i) elementary general post-primary education (*l. a. v. o.*). (ii) elementary vocational education (*l. b. o.*). (i) and (ii) may be located in schools providing other levels of post-primary and technical education. Voluntary extension possible and encouraged.

Following page 25

Country	Type (*a*) Homogeneous (uniform) classes or schools	Type (*b*) Heterogeneous or multilateral classes or schools
Norway		The majority of pupils complete compulsory schooling (9 years) in the common (comprehensive) lower secondary school where 9 years is not yet compulsory, the 7th year of the common primary school *(folkeskole)* may be followed by compulsory or voluntary attendance at a continuation school *(framhaldskole)* on a full-time or part-time basis. Voluntary extension encouraged.
Sweden		Pupils complete compulsory schooling (9 years) in the common (comprehensive) school.
Switzerland	Pupils complete compulsory schooling at age 14 or 15, according to their canton. The principal forms of continued education, all within the primary sector, are : (i) Pre-apprenticeship classes (i. e. primary classes strongly directed towards manual occupations) ; (ii) Higher division of the primary school ; three sections catering for the varying intellectual abilities and vocational preferences of the pupils ; (iii) Terminal primary classes with two sections : preparation for rural work, and simple trades.	Developing in Geneva, Basle-Urban, Neuchâtel, by the establishment of larger schools catering for a wider range of ability, the institution of a guidance period, and facilitating transfer from one section or course to another.
United Kingdom		Pupils complete their compulsory schooling (10th year) at the end of the second or third term of the school year in which they reach age 15. All are in secondary schools of various types, the majority of which, though not containing the whole range of ability, provide some differentiation of curricula in the final compulsory years, and the possibility of transfer to longer courses. Voluntary extension is possible and encouraged. The general trend, especially since 1965, is towards the establishment of more comprehensive (i.e. multilateral or bilateral) schools.

Chapter 2

PUPILS AND AIMS

1. *Some characteristics of continued education pupils*

Before trying to formulate the aims of curricula designed to cater for "young people who have completed or are about to complete compulsory education but do not stay on for further full-time education", it is illuminating to quote from the inquiries which some countries have undertaken into the educational needs of these pupils.

A Scottish report [1] offered the following diagnosis :

"Over the country as a whole, some 35 % of the boys and girls in an age group are transferred to courses of secondary education leading to presentation of either the Ordinary or the Higher grade of the Scottish Certificate of Education. Our interest lies mainly therefore with the boys and girls who comprise the remaining 65 % of the age group. This section of the age group includes young people who are above average in ability and are capable of considerable intellectual effort and of substantial attainment in a fairly wide field. It also includes boys and girls whose abilities will enable them to make only limited progress in a very restricted field which is closely related to practical pursuits. Between these two extremes, there is a large number of boys and girls who have the capacity to make good progress in suitably designed courses in schools and, later, to acquire a high level of skill and an understanding of the practical techniques of industry and commerce."

About the same young people, a report from England [2] noted that although they include some pupils of above average ability capable of doing work similar to that done by many pupils in a grammar school, "there will be a second group, generally much larger, who represent the 'average' boys and girls of their age ; and a third, usually smaller, group of those who have considerably more difficulty in remembering and applying what they learn, and who certainly work more slowly. Finally (there is) a fourth group of really backward pupils who have to struggle to attain an elementary mastery of reading, writing and calculation. No description of the size of these various groups will be accurate for all schools, but however uncertain the frontiers, all these territories have to be included in the educational map."

The Scottish study adds "The educational background of these boys and girls when they enter the secondary school is often not conducive to success... Some of them, because their experience in the primary school has been largely one of failure, have given up the effort to succeed, and a few may be passively or actively antagonistic to the discipline and work of the school. Nevertheless, with the resilience of their age, they are prepared to start anew in the secondary school and to respond with enthusiasm and renowed effort to the teacher who offers them success, even on a modest scale. As a general rule they are not interested in academic learning and prefer physical activity to thinking ; their mental activity is stimulated by real things and happenings in the physical world rather than by ideas and concepts. Though generalisations appeal less readily to them than to their abler fellows, they have nevertheless some ability to generalise from particular illustrations. The less their ability, the less well do they meet demands for sustained effort ; they respond best to tasks which yield quick results and most of them do not look far ahead. Generally, too, the less their ability, the less self-sufficient do they feel and the more dependent they are on the companionship and good opinion of their fellows. They like best to work in small groups or teams. As the time for leaving school draws nearer, most of them, though no long-term vocational desire may yet have matured, begin to look outwards from school to the excitements soon to be met in the adult world of work. They regard with new interest their friends who not so long ago left school and who now seem to find a much freer life with much more money to spend. It is perhaps not surprising that to many of the pupils, school, especially if they have as yet achieved little joy or success in it, becomes positively irksome."

These descriptions, drawn from and necessarily specific to their country of origin, cannot cover the whole spectrum of continued education pupils in Western Europe. From the substantial

---

1. *From School to Further Education*, Scottish Education Department, H.M.S.O. (Edinburgh) 1963, page 9.
2. Newsom Report, op. cit.

consensus of views on the aims of continued education which emerged from the Interlaken Seminar, it would appear nevertheless that young people of this type were to be found in many member countries, and that they had certain educational needs in common.

2. *The aims of continued education*

In the final report of the Seminar, the following aims were distinguished :

"(*a*) to arouse the curiosity and interest of the pupils in such a way as to lead them to continue their education and training as men and citizens ;

(*b*) to consolidate, supplement and extend their general education without any restriction of standard other than the pupils' ability, thus encouraging their transfer to other forms of education ;

(*c*) to give them an opportunity for developing personality and a sense of responsibility so as to produce balanced adults aware of their capacities and of their limitations ;

(*d*) to prepare pupils by varied practical work for their subsequent vocational training, thus facilitating their entry into working life ;

(*e*) to encourage the development of aptitudes for self-education, and to prepare pupils... for a proper use of leisure."

To what extent are these aims being realised in the programmes devised by member countries for this diverse group of pupils ? The term "programmes" is used rather than "curricula", because it is particularly important, in this type of education, to see it "in the round", which implies an appreciation of its avowed objectives, the relationships between the constituent subjects or sectors of the curriculum, the methods of teaching and the extension of the educative process beyond the walls of the school. In other sectors of education, it may well be useful and appropriate to draw up a comparative table of curricular subjects and the times allotted to them. But so diverse are the forms of continued education and the situations in which it is provided, that such a tabulation could well fail to do justice to the variety of experiment and development currently in progress. Instead, there follows a descriptive summary of the programme provided by each member country for its continued education pupils, set against a necessarily brief account of its system of secondary education. In a period of rapid development, it must inevitably offer a mixture of present practice and future intention. It does, however, reveal that, amid much fruitful diversity of thought, policy and practice, there are substantial areas of experience which are shared by all member countries. It will be the purpose of the concluding Chapter 3 to attempt to discern and to illustrate the significant trends.

3. *Summary of provisions in member States*

AUSTRIA

The School Organisation Act of 1962 made school attendance compulsory for 9 years (i.e. between age 6 and age 15).

After four years (6-10) in the elementary school *(Volksschule)*, pupils transfer to one of the following :

(*a*) Grammar School *(Gymnasium* or *Realgymnasium)* ;

(*b*) Senior elementary school *(Hauptschule)* ;

(*c*) Senior department of the elementary school *(Volksschule Oberstufe)*.

At the end of their 8th year, pupils from types (*b*) and (*c*) who are not proceeding either to intermediate or upper secondary education (general or vocational) or to other forms of full-time education, complete their period of compulsory schooling with a one-year Polytechnic course.

The Polytechnic course

Since this was an innovation introduced by the 1962 Act, it did not come into full operation until the school year 1966-67, when 1,113 classes were opened for 31,040 pupils (34 % of all 14-year olds). In some cases, they are organised as separate institutions, while others are attached to senior elementary special *(Sonderschulen)* or vocational schools *(Berufsschulen)*. The recommended number of pupils per class is 30 (with a maximum of 36). There are generally separate courses for boys and girls, although where numbers are small joint courses are instituted,

with separate tuition in some subjects. Wherever possible instruction is given by teachers specialised in the subjects concerned who are qualified as elementary or vocational teachers and who may have attended the special courses of further training in Pedagogical Institutes.

The aim of the Polytechnic course is to consolidate the pupils' basic general education, with special emphasis on their life and future occupations; for girls, special emphasis is placed on improving their proficiency in domestic science. Those pupils who have not yet chosen a specific vocation are prepared for the choice by suitable vocational guidance.

Polytechnic course: weekly subject and time-allocation

Subject	Time-allocation	
	Boys	Girls
Compulsory subjects		
Religion	2	2
Social and personal education (with special emphasis on the use of leisure)	2-3	2-3
Mother tongue	6	6
Mathematics	6	6
Social and economic studies	2-3	2-3
Scientific basis of the modern economy	2-3	2-3
Technical drawing	2	1
Health education	1	1
Vocational information and guidance	2-3	2-3
Handicraft	2-4	2
Domestic science and child care		4
Physical education	3	3
	33	35
Optional subjects		
Shorthand	2	2
Typewriting	2	2
Foreign language	3	3
Other non-compulsory activities		
Choral music	2	2
Instrumental music	2	2
Physical education	2	2
Art and craft	2	2

This programme of study, and the accompanying notes for guidance on the approach to its constituent subjects [1], show a number of significant features. Mother tongue and mathematics occupy over one third of the time given to compulsory subjects, with a clear emphasis on the consolidation and improvement of these basic skills. In its other main areas, the curriculum is notable for its immediacy and relevance to the pupil as an emergent adult worker and citizen. Religious, social and personal education deal directly with the problems of living with other people, with one's family, with the opposite sex and in the local and wider community. The elements of science are approached through their application to the servicing of the household (gas, water, electricity) and to food and clothing. Physical education is seen as a means of introducing pupils to the widening range of recreational activities which will be open to them in adult life. The theme of interdependence informs the social and economic studies which also include 20th-century history. These studies form a background to the vocational information and guidance in which visits to a wide variety of industrial, commercial and service establishments are seen as a central feature, supplemented by films and television broadcasts to introduce pupils to occupations which are not represented in their home region.

Belgium

Compulsory schooling lasts for eight years, from age six to age fourteen. At the time of writing, the extension first to nine and ultimately to ten years envisaged by the Law of 1964 had not been made compulsory. It should be pointed out that a high proportion of children (over 80 %) stay on voluntarily to complete a ninth year.

1. Regulation 174, 17 August 1966, Ministry of Education, Vienna.

(*a*) A grammar school (*athenée, lycée or collège*) ;

(*b*) An intermediate secondary school (*école moyenne*) ;

(*c*) A technical or vocational school (*école technique* or *école professionnelle*).

Type (*d*), a relic of the old terminal elementary system, is rapidly going out of existance, being attended by less than 5 % of the 12-14 age group. Its curricula are being re-modelled on the lines of those provided in the lower sections of the technical schools, to which pupils are encouraged to transfer when they reach the compulsory age-limit.

The pupils' choice of post-elementary school is much influenced by the wishes of their parents, with guidance from the elementary school teachers. Post-war reforms and development have tended to diminish the "finality" of this choice, and to defer it until the pupil has completed the lower secondary stage at age fifteen or later. An increasing number of multilateral intermediate schools have come into being, offering several types of education under the same roof. The concurrent trend towards establishing a curriculum with substantial elements common to types (*a*), (*b*) and (*c*) has been a further factor making for ease of transfer from one to the other, the reduction of "dead-ends" and the postponement of final choice.

In this situation where :

(*a*) a nine-year period of schooling, while not compulsory, is the norm for the majority of pupils ;

(*b*) substantial progress has been made towards the establishment of a three-year (12-15) curricular prescription which is common to both the intermediate secondary and the technical and vocational schools, it is difficult to identify a "continued education" sector with any precision.

Nevertheless, lower technical and vocational education has long been popular with working-class parents and many are continuing to seek it for their children. In some areas, it will be available at a new multilateral intermediate school, which may be a new foundation, or have developed from a former academic or intermediate school, or from a former lower technical or vocational school. In other areas, it will be provided by a technical or vocational school. Some account of the curricula arrangements at both types is therefore necessary.

I. *The multilateral intermediate school*

A pupil entering at age twelve has a weekly timetable of 36 × 50 minute periods of which :

(*a*) 30 are spent on a core curriculum which is common to all pupils in the first two years, and 25 in the third and second years ;

(*b*) 6 are devoted in the first year to one of three optional courses, and 11 periods in the third.

Common core curriculum and weekly time-allocation

Subject	No. of periods	
	2nd Year	3rd Year
Religious or moral education	2	2
Mother tongue	5	5
Second national language	4	4
History	2	2
Geography	2	1
Mathematics	4	4
Biology	1	1
Physics	1	1
Chemistry	—	1
Physical education	2	2
Musical education	1	—
Artistic education	2	—
Technical education	4	2
Total	30	25

Of the three options, classical, modern and technical, only the last-named is selected for tabulation. In brief, the classical option consists of Latin in the first two years, adding Greek and a modern language in the third. The modern option concentrates on modern languages or science in the second year, with one or other being emphasised in the third year, where some pupils may also opt for a combination of the two, or for typewriting and introductory economics.

The technical option is subdivided into A and B, which are respectively, though not exclusively, designed for girls and boys. Each of these is again subdivided into broad trade groups from the first year onwards, with the subdivisions becoming progressively more numerous in the second and third years. Where the 3-year observation and guidance cycle is provided in a former technical school, the third year of options A and B may be replaced by the corresponding year of the vocational courses traditional to this type of school. In these, the vocational orientation is more marked, with extra time allocated to job-related practical work, associated scientific and technical studies, and preparation for working life (workshop organisation, industrial health and safety etc.).

Similarly, an intermediate school with a guidance cycle is allowed to offer the traditional vocational courses from the second or third year onwards, provided that these are not available at a nearby State school.

Technical option A: Curriculum and weekly time-allocation

Second year

Subject	Groups (No. of periods)			
	Dress	Domestic education	Decorative arts	Other techniques
Artistic education	1	1	3	1
Domestic science	1	3	1	1
Dress	3	1	1	—
Other techniques	—	—	—	3
Complementary studies	1	1	1	—
Overall Total	36	36	36	36

Third year

Artistic education	2	2	6	—
Technical drawing	—	—	—	2
Scientific drawing	—	—	1	—
Domestic science	2	5	2	2
Dress	5	2	—	—
Other techniques	—	—	—	5
Education for family life	1	1	1	1
Complementary studies	1	1	1	1
Overall Total	36	36	36	36

Technical Option B

Second year

	Metal	Wood	Agriculture	Other techniques
Technical drawing and artistic education	3	3	1	1 or 2
Technology	2	2	2	2
Applied sciences	—	—	2	2 or 1
Complementary studies	1	1	1	1
Overall Total	36	36	36	36

Third year

	Mechanical	Electrical	Wood	Agriculture	Other techniques
Technical drawing	4	3	4	1	
Technology	2	2	2	2	
Mechanics	1	1	1	—	to be decided in each case
Electricity	1	3	1	—	
Practical work	3	2	3	4	
Applied science	—	—	—	3	
Rural economy	—	—	—	1	
Overall Total	36	36	36	36	

II. *The technical and vocational schools*

About 40 % of the 12-16 age group attend schools of this type. The vocational schools in particular cater for those who intend to enter skilled or semi-skilled employment. They derive mainly from religious bodies or from associations of industrialists and receive substantial support from public funds.

They offer four-year courses, the first two years being regarded as a guidance period, and the last two as the equivalent of the first stages of apprenticeship. Courses leading to a wide range of trades are available for both boys and girls, though the choice of any individual pupil may, in practice, be limited to what is offered by the schools in their locality. There are opportunities for the ablest boys and girls to pass on to upper technical education, lasting until 18, and about 20 % do so.

The curricula and timetables of these courses follow a common basic plan which is illustrated by the two following examples :

Mechanics

	Weekly periods			
Year	I	II	III	IV
Normal Age	12	13	14	15
1. *General subjects*				
Religious or moral education (including family ethics, and social and civic education)	2	2	2	2
Mother tongue	5	4	2	2
Second national language	2	—	—	—
Current affairs (including history and geography)	2	2	1	1
Mathematics	5	4	2	2
Science	2	2	1	—
Physical education	2	2	2	2
Artistic education (including drawing and modelling)	2	—	—	—
Music education	1	1	1	1
Total	23	17	11	10
2. *Technical subjects*				
Technical drawing	2	4	4	4
Applied science (including study of tools and materials, technology, mechanics and electricity)	2	2	3	3
Education for working life (methods of work, workshop organisation, planning, industrial hygiene, factory legislation)	—	2	2	3
Total	4	8	9	10
3. *Vocational practice*				
Manual training Craft practice	9	15	20	20
Total	9	15	20	20
Combined Total	36	40	40	40

Dressmaking

Year	Weekly periods			
	I	II	III	IV
Normal Age	12	13	14	15
1. *General subjects*				
Religious or moral education (including family ethics, social and civic education)	2	2	2	2
Mother tongue	6	5	3	2
Second national language	3	—	—	—
Current affairs (including history and geography)	3	1	1	1
Mathematics	4	2	2	1
Science	2	2	—	—
Physical education	2	2	2	2
Musical education	1	1	1	1
Artistic education	4	4	3	2
Total	27	19	14	11
2. *Technical subjects*				
Education for family life (including good manners, hygiene and child care)	1	1	2	2
Applied science (useful technical knowledge, elements of mechanics and electricity)	—	1	1	1
Education for working life (including information about local employment, workshop organisation and accounts)	—	—	—	1
Total	1	2	3	4
3. *Vocational theory and practice*				
Housecraft (cookery, housekeeping)	4	7	3	3
Pre-apprenticeship training	4	12	—	—
Craft practice	—	—	20	20
Total	8	19	23	23
Combined Total	36	40	40	38

Denmark

At school

Education in Denmark is compulsory from the beginning of the school year following the child's 7th birthday until the end of the school year in which he reaches 14. The vast majority of children spent their 7-year compulsory period in a main school (*folkeskole*) which provides both the primary and lower secondary stages in the same building under one head and with a staff common to both departments.

Recent years have seen a rapid increase in the proportion of pupils remaining voluntarily at school for an 8th, 9th and 10th year. As many as 90 % complete an 8th and 80 % a 9th year. Every local authority is obliged to provide an 8th year if a minimum of 10 pupils ask for it. If the authority has not set up an 8th, 9th or 10th year, it must bear the cost of tuition and school material for those children living in its area attending such classes in another authority's area.

At the end of class 5 of the main school, the pupils may or may not be divided into 2 sections, or "lines". If divided, they enter either

— line (*a*) mainly intended for pupils intending to pass on to classes 8, 9 or 10,

— line (*b*) (sometimes called the *real* line) mainly preparing for upper academic secondary education.

Not all schools make this division, but have a line (c) common to all pupils (the choice is as often dictated by educational philosophy as by reasons of size and resources).

For the purposes of this study, therefore, "continued education" pupils comprise both the 10 % who leave full-time schooling at the end of their 7th year, and those who stay on voluntarily

for an 8th, 9th or 10th year in line (*a*) or in line (*c*). It should be pointed out, however, that these voluntary extension years need not necessarily be spent in the main school. As will be seen later, substantial numbers of pupils choose the alternative offered by the full-time courses at the residential continuation school (*efterskoler*, or youth high school).

1. *Curriculum and timetable for Class 7 (line* (a)*) in Copenhagen* folkeskolen

The school week consists of from 34 or 35 50-minute periods. 26 of these are devoted to a core of subjects common to both boys and girls ; and include Danish (5), arithmetic (5), religious instruction (1), history (2), geography (2), biology (2), physics (2), English (3), physical education (2), music (1), and art (1). A further 5 periods are given to needlework and domestic sciences for girls, and 4 to handicraft and additional physical education for boys. In addition there are 4 periods of options, including extra periods of core subjects, and vocational guidance for those intending to leave at the end of the year.

There have been recent signs of a move towards the postponement of separation into "lines" until after the 7th year, and to replace it by a form "setting". Pupils who would formerly have been segregated into a non-academic line from the 5th year onwards can join the more academic "sets" for their good subjects, which they can then offer in the academic (*real*) leaving examination at the end of the 9th year.

2. *Curriculum and weekly time-allocation for the voluntary 8th, 9th and 10th years (Copenhagen* folkeskolen) *line* (a) *(practical bias)*

(*a*) In all three years, 20 of the 35 weekly periods are allocated to the common compulsory core of mother tongue, arithmetic, religious education, social and environmental studies, and physical education.

(*b*) Pupils then choose one of three groups of subjects (8 periods for each group) which add a pre-vocational element to their studies. Group 1 consists of English, accounts and typewriting ; Group 2 of physics, geometrical drawing and mathematics ; Group 3 offers practical work in wood or metal, or in domestic science or needlework, together with related theory, plus either art or the study of motor vehicles.

(*c*) For their remaining 4 periods, pupils may choose one or two subjects from a fairly long list of options. This enables them to have extra lessons in subjects which they are already studying in (*a*) or (*b*), a second foreign language, or a greater variety of cultural and hobby subjects. Schools are left free to add this list of options as the interests of the pupils and their staff allow. Thus the Volkparken school, in a northern suburb of Copenhagen, offers child care, drama, "teenage" (fashion, beauty culture, personal relations etc.), film appreciation, tourist English and tourist German.

The aim of this course is to improve pupils' general knowledge and to give them a realistic introduction to life after school. It gives scope for the exercise of their vocational preferences, while a period of one or two weeks actual "practice in the trade", with related preparation and follow-up in school and visits to other undertakings gives them a foretaste of what going to work is like.

3. *The Rodøvre experimental centre*

As in other countries, the extension of school life in Denmark, albeit on a voluntary basis, has led to experiments in broadening the curriculum of the lower secondary stage so as to make it a more effective preparation for adult life. An Act of 1964 authorised the Ministry of Education to set up an experimental centre, and one is being developed on an 11-acre site at Rodøvre in a suburb of Copenhagen.

Among its objectives are :

(*a*) to try out the curricula for the voluntary 8th, 9th and 10th years suggested in the Ministry's official guide, and to pioneer their further development ;

(*b*) to develop an information and guidance service on this phase of education ;

(*c*) to provide in-service training courses for teachers. The setting in which these objectives are to be pursued is unusually interesting. A "Youth Town" is being built which will, when complete, be a microcosm of an adult community. It already has its own town hall, church, insurance office,

bank, super-market and petrol station. The last four have been devised with the close co-operation and help of industry and commerce, and the design, construction and decoration have been carried out by students from the relevant vocational schools in Copenhagen. The bank and the insurance buildings are ingeniously dual-purpose, consisting in part of an actual branch of a bank and a local insurance office, in which real transactions can be carried out, and in part of an associated classroom for observation, instruction and follow-up for groups of teachers or children, in which employees of the firms concerned take part.

Also on the campus are a newly-built experimental school, practical workshops for wood, metal, engine repairs and construction, and laboratories and greenhouses for agriculture and horticulture, together with residential and cafeteria accommodation for 240 pupils, and for teachers attending training courses. With the continuing co-operation of industry and commerce, further additions to the "Town's" economic complex (e.g. a post office) are being planned to provide as broad a range of real-life experience and vocational stimulus as possible.

Though not complete, the Centre is already used by groups of pupils from the 8th, 9th and 10th years, and from the academic line in neighbouring schools. With their help, sets of teaching materials are being produced, again with the co-operation of firms, which, together with guide curricula, will be sent out to the schools to aid them in preparing pupils for a visit to the Centre. It is envisaged that 4,000 pupils per year, with groups drawn from all over Denmark, will come, with their teachers, for two-week courses. The pupils will live in family groups of 4, each of which will be given a sum of money, to keep itself for the duration of the visit. Each will be responsible for feeding itself (either at the cafeteria or by doing some of its own cooking) and for doing its own budgeting and housekeeping. Taxes will be levied by the elected pupils' council for communal activities such as dances and theatre visits. The opportunities for social, economic and civic training education in a realistic and democratic setting should be unusually varied and exciting.

Much of the actual teaching will be done by the specialist staff of the Centre, which, in addition to trained teachers, will include others with commercial and industrial experience as well as employees of firms (e.g. the bank, the insurance company and the super-market) represented in the town.

The teachers accompanying the parties of pupils will spend the fortnight in an in-service training course of observation, discussion and following a programme of induction to the world of industry and commerce.

Residential continuation schools (efterskolen)

These offer an unusual opportunity for the 7th-year leaver who nevertheless wishes to continue with a form of full-time schooling. Their alternative title of "Youth Folk High Schools" rightly indicates that they draw their inspiration from Grundtwig, Kold and the other pioneers of the Folk High School movement. Nearly all are private foundations, grant-aided by the Ministry of Education to the extent of about 70 % of their running costs (including staff salaries). Until 1967, they did not prepare their students for any examination or vocation, but aimed to provide continued general education through a mixture of theoretical and practical subjects, and to add to the vocational guidance begun in the compulsory school period. Although this still remains their main purpose and provision, certain vocational and examination-directed courses can now be taken, provided that the Ministry of Education considers that they are adequately staffed and equipped. 62 of the 108 *efterskolen* have been allowed to start examination courses in general subjects. In these early stages of the experiment, Danish, arithmetic, typewriting and modern languages have proved popular, although they still represent less than one third of the total course-work. In the vocational sector, only preparatory courses in agriculture have so far been offered, but other lines are to be added.

These schools were originally intended to serve a young rural population, many of them working on family farms after leaving school at the end of the minimum period. Courses, normally of 5 months, tended to follow a seasonal pattern, and attracted girls in the summer and boys in the winter.

Now that they are increasingly regarded as a genuine alternative to the voluntary 8th and 9th years of full-time attendance at day-schools, courses of 10 months, broadly equivalent to the school year, are growing in popularity. At the same time, more of the students (over a quarter of the 8,000 in the 14 - 18 age group enrolled in 1965-66) are drawn from urban areas.

There is no doubt that these schools constitute an important and unusual form of continued education. At first sight, it might seem that, with the progressive increase in the size of the main

schools (*folkeskolen*) and in their ability to provide more fully for the voluntary 8th, 9th and 10th years, the continuation school might lose its popularity as an alternative. There are few signs, however, that this is happening. Although there has been a small reduction in the numbers of pupils enrolled, more are in fact attending for longer periods (in 1965-66, 28 % of students attended courses of from 8 to 11 months' duration). Nor is it envisaged that these longer courses will progressively disappear if and when the compulsory school life is extended. The Danish Folk High School has always recognised the importance of a sustained period of residential education, with all that it can mean for social education and the development of new relationships between adults and young people. The value of this experience to the boy or girl from a disturbed, inadequate or unhappy home is fully recognised. For those young people - and they exist all over Europe - who are just tired of traditional schooling, a change of environment, of companions, and of their relationships with adults, the continuation schools may well provide a genuine second chance. It is also important to point out that the Danish Ministry of Education envisages that some, having made this fresh start in a new setting, may return to full-time schooling.

Residential education is, of course, expensive, and great efforts are made to ensure that this is not an obstacle to the parents' and pupils' choice of this alternative. Boarding costs are $ 25 per month, payable by the pupils. The State refunds 50 % in advance, regardless of means. Up to a further 40 %, depending on parents' income, can also be refunded. Those local education authorities which have not set up a voluntary 8th, 9th and 10th year extension to their main school must meet the remaining half in full. Approximately half the pupils attending continuation schools in 1965-66 had the cost refunded in full.

The teaching force in these schools is very diverse. A substantial nucleus of full time teachers is considerably reinforced by a large body of part-timers. Both categories contain qualified day-school teachers, but there are many with technical qualifications and practical experience in many walks of life, thus providing a broader spectrum of adult contacts than can usually be found in the normal day-school.

Federal Republic of Germany

Since the competent authorities for education are the 11 States (*Länder*), there is no uniform school system throughout the Republic. What follows, therefore, is a generalised account of arrangements for continued education, with some reference to common problems and significant variations.

Full-time schooling is compulsory for 9 years, from age 6 to age 15 in 10 of the 11 States; it becomes compulsory in the 11th (Bavaria) in the 1968-69 school year.

Having completed their fourth (or, in some cases, their sixth) year in the elementary school (*Grundschule*) pupils may proceed to one of three types of school:

(*a*) a grammar school (*Gymnasium*)

(*b*) an intermediate secondary school (*Realschule*)

(*c*) a senior elementary, or "main" school (*Hauptschule*).

In some States (e.g. Hesse), a further transfer may take place at 13+ from the main school to a lower vocational school (*Berufsfachschule*).

The type of school to which a pupil transfers is generally based on his elementary school report, together with a trial period of schooling where teaching is shared by teachers from all three types. Some States regard the first two years after transfer (i.e. the 5th and 6th of schooling) as a guidance and observation period.

Although the proportion of children transferring to types (*a*) and (*b*) is increasing, the majority still proceed to type (*c*), and it is here that the pupils who do not intend to continue in full-time education after age 15 are to be found. Except in Berlin, the senior elementary school is usually housed in the same building as the elementary school, and is under the direction of the same headmaster (*Rektor*). In order to create larger units and to offer a wider choice of specialist subject teaching, there is a move towards the creation of larger centralised schools, especially in rural areas, thereby reducing the number of small, undifferentiated village or parochial schools. In Hesse, these larger central schools are often bilateral, in the sense that they include both intermediate secondary and senior elementary pupils (types (*b*) and (*c*)).

The senior elementary school caters for "those pupils with an aptitude for practical occupations by giving them the fundamental knowledge and skills to enable them to enter on a practical career,

and on which to build up their further training in vocational, a special vocational or a continuation school"[1].

It is, therefore, a school for general education rather than for vocational training.

With an increasing proportion, though still a minority, of children going on to grammar and intermediate secondary schools, considerable care and thought has been given to ensuring that the senior elementary school shall not be regarded as a residual school for the "leftovers". The introduction of a 9th compulsory year is not seen merely as an extension of elementary schooling, but as an opportunity to devise a course specially designed to introduce young people to the modern world. There is general agreement that it should strongly emphasise the problems of choosing a career, and education for citizenship, while its general education elements should not only consolidate and improve the pupil's basic knowledge, but foster the development of his personality. The introduction of pupils to working life is not intended as specific "job finding", but rather as a bridge to a career. It aims to acquaint pupils with the many facets of working life, to increase their readiness for work, and prepare them for the hazards of life in modern industrial society.

The following curriculum and weekly time-allocation, while not necessarily typical, shows how one State has attempted to implement these general principles.

North-Rhine Westphalia
Weekly subject and time-allocation: 9th year senior elementary school

Subject	Hours	Periods
Mother tongue	4	4
Religion	2	3
Mathematics	3½	5
Physics	1½	2
Biology	¾	1
Modern language	2¼	3
History, geography, civics	3¾	4
Preparation for work (Vocational information, economics, workshop practice, domestic science)	5	6
Study groups	1½	2
Art, craft, needlework, music	1½	2
Sport	¾	2
Total	26½	34

The merging of history and geography with civics is echoed in the 9th-year curricula prescribed by other States, where it appears under the general title of "special knowledge" *(Sachkunde)* or "special subject knowledge" (*Sachunterricht*). Hesse groups history, social studies and geography under the title of "world knowledge" *(Weltkunde)*.

In a sense, this fusing of traditional disciplines like history and geography exemplifies the post-war efforts to correlate the teaching of different subjects from the 5th school year onwards, which has gained new impetus in face of the problems of this final year at school. As Schulze and Führ point out[2], "an attempt is made, on the one hand, to put pupils in touch with the main currents of intellectual and political life and, on the other hand (by means of the overlapping of separate subjects) to make themselves familiar with the structure of modern industrial society and the forces at work in it".

The North-Rhine Westphalian curriculum illustrates another trend by its inclusion of two periods devoted to study groups (which are timetabled for Saturday morning, and therefore outside the 5-day timetable). This is an attempt to solve the problem of individual treatment which is urgent in the senior elementary school, where pupils may show considerable divergences of ability and aptitude. It is also interesting to record that, in a country where the main school day is often confined to the morning session, arts, crafts, music and needlework are also timetabled for afternoon periods.

Another experimental area of the 9th-year course is concerned with bringing school pupils into direct contact with the working world. This takes two forms, examples of which are currently

1. *Schools in the Federal Republic of Germany*, W. Schulze and C. Führ, Deutches Institut für Internationale Pädagogische Forschung, 1967, p. 29.
2. Op. cit. p. 31.

practised, inter alia, in Hesse. The first is the practice of releasing 9th-year pupils from school for one day per week to attend vocational schools (*Berufsschulen*) at which they will continue compulsory part-time attendance after the conclusion of their full-time schooling. Much of the success of this bridging device depends on the correlation of the teaching given at each institution. The second consists of enabling pupils in their final year to have short periods of actually working in industrial, commercial or service establishments. Valuable experience is being gained of the problems associated with this type of extra-mural work, of the need for careful preparation, close liaison with the receiving firms, involvement of the teachers in the work periods, and integration with the existing vocational guidance services. Some distinction is also emerging between its general value as an insight into the world of work and its function in guiding pupils into specific jobs.

France

The Decree of 6 January 1959 envisaged that, as from 1 January 1967, school attendance should be compulsory for all children to the age of 16, thereby extending the compulsory period from 8 to 10 years.

A concurrent reform of school structures has, as its principal aim, the progressive replacement of the previous variety of forms of education for 11+ children by a 4-year lower stage (*premier cycle*) of secondary education for all. To this end, Colleges of Secondary Education (C.E.S., or *Collèges d'Enseignement Secondaire*) are progressively being established throughout France as multilateral schools designed to provide four-year courses of secondary education for all children between the ages of 11 and 15 in their catchment areas.

At the time of writing, both these major reforms are still in process of implementation. It is envisaged that by 1972, when the extension of the compulsory period of full-time schooling from 8 to 10 years is made fully effective for all children, there shall be sufficient C.E.S. to receive them. What follows, therefore, is necessarily a forward-looking account, compassing both the areas in which the reforms are well on the way to being accomplished and those in which they are further from realisation.

At the age of 11+, having completed the first 5 years of compulsory schooling, pupils pass to lower secondary education. If the local committee for the scrutiny of school records considers that the pupils' standard of elementary education is appropriate, they may enter a general section of lower secondary education where, after one term of diagnosis and guidance, they will begin to follow, though by no means irrevocably, a course with either a classical or a modern (science/modern languages) bias. Those pupils who have not been considered suitable for direct entry into this general section, enter a two-year transitional stage. Here they receive an education, given by form teachers, designed to consolidate and improve their basic knowledge, and to stimulate their interest by the use of more active methods. This stage is diagnostic, in the sense that pupils whose work is of appropriate quality may be guided to enter the classical or modern sections.

Since both the long and short courses provided in the classical and modern sections are designed to link with upper secondary (*deuxième cycle*) studies, the pupils who enter them, and the curricula they follow are not of major interest for the purposes of this study.

Of more immediate concern are the pupils who do not. They, having completed their two-year transitional stage, enter the terminal practical education section, where they will spend the concluding two years of their compulsory schooling on studies which may lead to a school leaving certificate (*diplôme de fin d'études obligatoires*). It should be emphasised, however, that those who show sufficient ability at this stage may yet, at its conclusion, have the opportunity of admittance to a shorter course of upper secondary education, leading to intermediate vocational qualifications. For the remainder, however, the terminal practical education section will be the concluding stage of full-time education.

Some of these sections are already incorporated in colleges of secondary education (C.E.S.) and when the reforms of 1959 are fully implemented, it is intended that all should be so. During the transitional period, however, many form part of, or are annexed to interim institutions such as colleges of technical education (C.E.T.), colleges of general education (C.E.G.), or, in rare cases, to grammar schools (*lycées*).

This terminal practical education need not take the form of full-time attendance at school but may be accomplished by part-time attendance for 12 hours (i.e. 2 days) per week either at one

of the types of school mentioned in the preceding paragraph, or at a training school maintained by an industrial or commercial undertaking ; for the remainder of their time, pupils gain practical experience in employment. They are, however, considered to be *in statu pupillari*, to be continuing their full-time education until the end of the compulsory period, and to be the responsibility, albeit shared with the firms, of the education authorities.

These arrangements, whose organisation shows considerable local variations, are regarded as a temporary expedient designed to come to an end in 1972. By that time, it is planned to provide sufficient places in the terminal practical sections of lower secondary schools (especially in the colleges of secondary education) to enable all pupils to remain in full-time attendance at an institution of lower secondary education until the completion of the compulsory period.

The pedagogy and curriculum for this 2-year terminal practical course have been the subject of considerable thought and discussion since the first experimental classes were initiated by Ministerial Circular in 1962. The challenge of devising an appropriate education for large numbers of pupils who had previously left school at 14, but were now to stay on for one and ultimately two more years was clearly recognised. Secondary education had hitherto been geared to children with good verbal facility and a capacity for handling abstractions. Now, an education suited to other types and levels of aptitude, attitude and intelligence, must be devised.

The experience gained in subsequent years as more courses were established was incorporated and elaborated in a number of Ministerial Circulars issued between 1962 and 1966. In the latter year, detailed instructions [1] were published, including the following table of the main areas of work and the time to be allotted to each.

The principal points made in these instructions, and in earlier circulars may be summarised as follows :

A. *Curricular content*

1. Every effort should be made to strengthen the pupils' basic education, linking with and consolidating the work done in the preceding transition classes, and gaining interest and impetus from the practical work and varied activities.

2. The practical work should be appropriately serious, realistic and "grown-up", and chosen with a view to its intellectual content. It should be conceived as part of a general preparation for working life and not as training for a specific occupation.

3. Alongside this practical work, pupils should be provided with a full range of information about possible jobs and the opportunities for vocational training. Well prepared works visits and periods of works experience could add to the realism of this aspect of the curriculum.

4. Of equal importance was the education of the pupil as a young citizen who should be prepared to understand and to cope successfully with the practical tasks of citizenship (e.g. the completion of social security forms, cheques, money orders etc.).

5. The young person's need for "compensatory activities" (e.g. sport, recreation, entertainment) was stressed. He should be introduced to a wide range of leisure-time pursuits and helped to discriminate and choose wisely between them.

6. The interest of girls in homemaking and family life should be fruitfully exploited, bearing in mind the increasing "mechanisation" of the home. Boys, too, should be encouraged to take a closer interest in this aspect of adult life.

B. *Teaching methods*

(i) A new pedagogy was envisaged, in which the basic skills of observation, reasoning, reading, writing and calculation should be fostered by new methods, with increased emphasis being placed on oral expression.

---

1. *Instructions Nos. 66-147*, 5 April 1966. Ministère de l'Education Nationale. Published in Brochure No. 145 F.D. Institut Pédagogique National, Paris 1967.

Guide timetable for 3rd and 4th year practical classes

The week's activities in each class	Time-allocation
1. *Acquiring means of expression* (interpretation of literature, telling the story in one's own words, dramatised situations etc.). 1½ hours with the whole class, ½ hour with half-class groups for remedial work.	2 hours (1½ + ½) (*a*)
2. *Investigations* based on documents, visits and interviews, history, geography, science, nature study, economics (the labour market, buying and selling, family budgets etc.). Preparation, execution and follow-up : 1½ hours with whole class + 1 hour in half-class groups.	2½ hours (1½ + 1)
3. *Mathematical and logical processes* (preparatory exercises, generalisation - graphs, diagrams, interpretation of simple accounts etc.). 1½ hours whole class + ½ hour in half-class groups for remedial work.	2 hours (1½ + ½)
4. *Science and technology* (*a*) practical work in science : 1 hour in half-class groups (*b*) assembling and dismantling of mechanical objects : 1½ hours in half-class groups (*c*) Use of standard drawings and plans (*d*) Study of methods of construction preparatory to work in the workshop : 1½ hours with whole class (*e*) mathematical, scientific and technological follow-up based on pupils' observations : 1 hour with whole class.	5 hours (2½ + 2½)
5. *Small-scale constructive work* (acquiring versatile working skills) (*a*) *Common scheme for boys and girls* (workshop practice with light tools, small soldering, electrical apparatus etc.). 3 hours in half-class groups (2 × 1½ hours) (*b*) *Special scheme* — for boys : work in metal, wood and buildings materials ; use of workshop machines — for girls : needlework, fabrics, cooking, use of domestic appliances (boys' and girls' groups, 5 × 1½ hours).	7½ hours (4½ + 3)
6. *Systematic educative exercises* (to complement the acquisition of working skills). 2 hours in half-class groups (*a*) psycho-motary sector — speed, precision, dexterity (with either hand) (*b*) exercises in arrangement and display suitable for shops and stores etc. (*c*) speaking and writing in the work situation : (report writing, understanding of instructions etc.).	
7. *Aesthetic education* (*a*) Educational handwork (basketry, weaving, pottery, modelling etc.) (*b*) painting and drawing (in half-classes) (*c*) singing, listening to records (plus membership of the school choir).	3 hours (0 + 3 hrs)
8. *Physical education and sport* : the physical education course : sporting and open-air activities.	2 hours (2 + 0 + games practice)
Total :	26 hours (13½ + 12½ + games practice)

(*a*) Of the figures in brackets, the first shows the hours spent as a whole class, the second those spent in half-class groups.

(ii) Subjects should no longer be taught in mutually exclusive compartments, but in much closer relationship to each other. Teachers are expected to work as a team.

(iii) Teacher-pupil relationships should be less formal and more warmly familiar.

(iv) The traditional tests, examinations and mark list would need to be replaced by teachers' assessments of pupils' achievements based on their day-to-day work. Competition should give way to group and team-work.

(v) The traditional timetable would need to be modified, so as to accommodate the active integrated and outward looking curriculum, and to allow for pupils to pursue their projects and inquiries outside school.

In concluding this necessarily brief outline of some aspects of terminal practical classes it is essential to stress that they form an integral part of the lower stages of secondary education. Although their roots lie in the former primary school terminal classes (*classes de fin d'études primaires*), they are designed to lengthen and broaden the general education of the young people who pass through them, and to provide them with a genuine secondary education, more appropriate

to the demands of life in the modern world than was possible under the old system. During the period of transition from old to new, their frequent physical and social separation from the other sections of lower secondary education is being progressively reduced as they become incorporated in the new colleges of secondary education as an essential part of the lower secondary stage. As such, they should be able more fully to share in the educational and vocational guidance which, since the inception of the current reforms, have been regarded as an essential characteristic of the lower secondary stage.

ICELAND

On reaching the age of 13, all pupils pass from the second stage of primary to the first stage of secondary education, which lasts until 15. The 8-year period of compulsory schooling (7-15) is then completed.

This 2-year period is the first stage of a 4-year course of lower secondary general schooling (*gagn fraedaslig*), and may be spent in one of the following types of school :

1. A "youth school" (*ungling yaskolar*). In rural areas and in smaller villages, these are often run as a direct continuation of primary schools, and offer a 2-year course.

2. A middle school (*midskoli*), offering a 3-year course, and most frequent in the larger villages and smaller towns.

3. A secondary general school (*gagn fraedaskoli*) offering a 4-year course ; this is the most common type, and is primarily to be found in the larger towns.

Pupils from the rural areas, having completed the 2-year course in the youth school, may proceed to district general secondary schools, which are boarding establishments. Here, after a further 2 years, they may take the same examination as pupils completing the 4-year course in an urban secondary general school.

The curricula are supposed to be the same for all types, so that pupils may transfer easily from one type to another in the course of the 4 years. The type of school attended is largely determined by the size and location of the pupil's home community.

About 87 % of pupils completing their compulsory education continue voluntarily for a further (9th) year.

Curriculum for the lower secondary school

Class / Subjects	1 a (1)	1 b (2)	2 a	2 b	3 a	3 b	4 a	4 b
Icelandic	6	8	6	6	6	6	6	6
Danish	5	(5)	4	3	4	5	3	(3)
English			5		5		5	(5)
Arithmetic	5	6	3	5	} 5		3	5
Mathematics			2					
Religious history	2	2						
World history	3	2						
Icelandic history and sociology				4	3		3	8
Geography	2	} 4	2		2			
Natural history	3		2		2			
Hygiene			2		1	1	2	
Physics			(1)	} 2	2	2	(2)	2
Chemistry							2	
Biology								
Book-keeping						2	(3)	2
Typewriting						2	(2)	1
Writing	1	2		1				
Drawing	2	2	2	2	(2)	2	(2)	2
Handicraft	2	6-8	2	6	(2)	6	(2)	6
Singing	1	1	1	1	1	1	(1)	1
Physical education	3	3	3	3	3	3	3	3
Free choice	1	1	1	1	1	1	1	1
Total	36	35-37 (40-42)	35 (36)	36	35 (39)	36	28 (40)	32 (40)

(1) General course. (2) Vocational course.

It will be noted that, in all 4 years, about half the time in the vocational course is allotted to practical subjects, while in the general course more time is spent on academic subjects and foreign languages.

Curricula are issued centrally by the Ministry of Education, and form a common basic pattern for all types of lower secondary school, though there is some variation to suit the circumstances and resources of particular schools. Where possible, classes are organised in year groups according to age. In the larger schools with several classes in a year group, pupils are streamed according to ability, although there is some movement towards "setting". The classes for the least able children are often the smallest. There is considerable freedom of teaching method and experiments are encouraged. Educational television has been used since 1967.

There is close co-operation between the schools and both private and municipal youth organisations. After the end of the school day, school premises are often used for youth activities, especially in the larger towns.

Teachers of general subjects in elementary and lower secondary schools receive a four-year training, for which the possession of an intermediate secondary school diploma is a minimum prerequisite. There are special courses, both preparatory and advanced, for teachers of handicrafts, art, music and domestic science. Attendance at refresher courses, both in Iceland and in other Scandinavian countries, is encouraged.

Ireland

Schooling is compulsory for 8 years (6-14). After 6 years of primary education pupils proceed at 12 and 13 years of age to one of the following :

1. *Secondary Top*

This is a 2-year general school course conducted in a primary school and is only recognised by the Ministry of Education where separate secondary schools are not available. Some transfer to secondary schools or vocational schools after one year.

2. *Secondary (general) education*

These are private institutions, grant-aided and subject to inspection by the Ministry of Education, which also prescribes the curricula after appropriate consultation. Admission is by special examination, or the possession of the primary school certificate.

3. *Continued (vocational) education*

This is intended for pupils aged 13 and over who have completed their primary schooling.

4. *Comprehensive secondary education*

A number of pilot institutions are in process of development, combining secondary general and vocational education.

The majority of pupils with whom this study is concerned follow route 1 or route 3. The diminishing proportion in secondary tops receive an extended elementary education. Those entering route 3 follow a 2-year full-time course of combined general, practical and related theoretical education, each element occupying about one third of the weekly timetable of 25 to 30 lessons. Instruction in the mother tongue, English, arithmetic, geography, civics and religion form the general education base. The practical and related theoretical work varies according to the occupational bias of the school. In a junior technical school for boys, it will largely consist of practical work in wood and metal and technical drawing. Typewriting, office practice and book-keeping are provided in junior commercial schools, homecraft and domestic science in domestic schools for girls, and practical work in agriculture and horticulture with elementary plant and soil science in junior agricultural schools.

Teachers of practical subjects usually have appropriate trade qualifications and experience, to which a one, two, or three-year course of teacher training is added. Trained primary school teachers are responsible for the general education element in the programme.

Italy

The period of compulsory schooling is 8 years (from age 6 to age 14), the first five of which are spent in the elementary school.

The Law of 1962, which came into operation a year later, instituted a common middle school *(scuola media unica)* which was to provide a common 3-year (11-14) stage of lower secondary education for all children. It was designed progressively to replace the wide variety of institutions which had hitherto catered for that age group, among which the most significant from the "continued education" point of view were the senior elementary school *(scuola post-elementare)* and the lower vocational school *(scuola di avviamento al lavoro)*. There were three main motives behind this reform : the desire for social justice and greater equality of opportunity ; the need, in face of rapid economic development, to tap the potential of the hitherto under-privileged sections of the population ; finally, to raise the common base of general education and to do away with the narrow and premature specialisation which had been a feature of the previous system.

The Law ordained that, by October 1966, a common middle school should be established in every commune with more than 3,000 inhabitants, "and in all localities where the need is manifest". By 1966, communes without middle schools contained only 6.9 % of the population and, by October 1967, some 8,000 of these institutions were in being, receiving nearly 90 % of the children leaving elementary schools. Attendance is free, and admission is obtained on satisfactory completion of elementary schooling.

Since the former vertical divisions have been virtually replaced by a horizontal system, it is not possible to single out a particular type of school intended for "continued education" pupils. The setting-up throughout the country of middle schools, and the concurrent drive to ensure that all children effectively complete the compulsory period has meant both a broadening and a prolongation of schooling for many who had hitherto only completed the elementary stage. Streaming, and even "setting" according to ability are not encouraged, so that it is possible closely to identify a particular course or section of the school as being specifically intended for those who will terminate their full-time education on completion of the compulsory period.

Middle School : Weekly subject and time allocation [1]

Subjects	Hours per week		
	1st year	2nd year	3rd year
A. *Compulsory subjects*			
I. Religion	1	1	1
II. Mother tongue	6	—	5
Mother tongue and elementary Latin	—	9	—
History and civic education, and geography	4	4	4
III. Foreign language (English or French or Spanish)	2	3	3
IV. Mathematics	3	3	3
Observation and elementary natural science	2	2	3
V. Artistic education	2	2	2
VI. Craftwork (handicraft for boys) (homecrafts for girls)	2	—	—
VII. Musical education	1	—	—
VIII. Physical education	2	2	2
	25	26	23
B. *Optional subjects*			
IX. Latin	—	—	4
X. Craftwork	—	2	3
XI. Musical education	—	1	1
Total	25	27, 28, 29	24 - 26 27 - 31

As the above table of the compulsory common curriculum shows, all pupils follow the same regime for the first year (subject to possible extension and variation by means of the "after-school" *(doposcuola)* described below). In the second and third years, a substantial common core is maintained, but pupils may choose one of three options on which to spend a small proportion of their weekly timetable. In the third year this enables Latin to be introduced for those aspiring to enter the classical grammar school *(liceo classico)*, and for slightly more time to be spent on craft work by those with practical employment or further vocational education in view. Children who

1. *Raccolta delle Disposizioni Legislative e Amministrative Sulla Scuola Media*. G. di Stefano, Rome 1966.

find particular difficulty in acquiring the basic skills are catered for in special classes *(classi differenziali)*, while those who are unable to keep up with the general pace and level are catered for in "recovery" classes *(classi di aggiornamento)*. Both are regarded as an important element in this stage of lower secondary education.

The teaching is on a modified subject specialist basis (e.g. in groups II, III and IV one or more subjects may be taught by the same teacher) ; this is regarded as a significant step towards the elimination of the single form teacher characteristic of the former elementary system.

At the end of the 3-year period, pupils take an examination for the middle school certificate, which includes the mother tongue, history and civics, geography, mathematics, natural science, a foreign language, art and physical education. Those possessing this certificate (plus a test in Latin for entrants to classical grammar schools) may enrol in a variety of upper secondary and technical schools, including the scientific grammar schools.

To encompass in a single curriculum with only marginal optional variations the range of subjects and levels of teaching appropriate to abilities, aptitudes and aspirations of all children in this age group was recognised as a major problem by those responsible for the 1962 Act. They were also conscious of the relative shortness of the school day, which is generally limited, for a variety of reasons, to half-day sessions. The Act therefore permitted any middle school which wished and was able to do so, to institute an afternoon session *(doposcuola)* for 10 hours per week, devoted to additional studies and extra curricula activities. As might perhaps be expected from an innovation which called for a radical change in traditional practice, and whose social, financial and administrative implications were difficult to foresee, the development of the after-school period has been slow and fraught with controversy. By October 1967, it was estimated that some 15 % of middle schools had adopted it. There is no doubt, however, that it offers in theory considerable opportunities for adding to and varying the basic regime of the common curriculum, and for catering for the interests, inclinations and abilities of the individual. For the "continued education" pupil it could provide a more active, practical and informal element to his secondary education.

Netherlands

1. *General background*

Compulsory schooling lasts for 8 years (6-14), with transfer from primary to post-primary schools taking place at 12 +. In February 1967, a Bill was submitted extending the compulsory period to 9 years, "but it cannot come into force until after 1968, because suitable forms of education have not been developed, though research is proceeding apace" [1]. A post-primary education Act (known popularly as the "Mammoth Act"), covering all post-primary education up to, but excluding the higher, or university level, was passed in 1963 and came into force in August 1968. This Act seeks to satisfy the following requirements :

(*a*) Pupils at post-primary schools must be given a broader education than that hitherto offered by the basic primary school curriculum and be given a deeper insight into the material taught, which itself must be oriented with a view to their probable later sphere of work.

(*b*) Every pupil on leaving primary school should have an opportunity to obtain a general education (i.e. not directly oriented to careers) and the type of vocational education whose scope and content are most suited to his aptitudes and capabilities.

(*c*) Every vocational course should be preceded by a phase of general education.

(*d*) The moment in post-primary education at which vocational education begins to predominate will depend on the pupil's aptitudes ; broadly speaking, the more intellectually gifted the pupil is, the later it will be.

(*e*) The structure of post-primary education should be such as to provide facilities for pupils either to change over from one type of school to another of the same grade or to proceed from a lower to a higher grade of school.

2. *Structure of post-primary education*

Post-primary education comprises :

(*a*) pre-university education ;

(*b*) general post-primary education, divided into 3 grades : (i) elementary *(l.a.v.o.)*, (ii) secondary *(m.a.v.o.)*, and (iii) higher *(h.a.v.o.)* ;

1. Ministry of Education and Science ; *School Education in the Netherlands in 1968*, Docinform No. 214, The Hague 1967, p. 3.

(*c*) vocational education and training, also divided into 3 grades : (i) elementary *(l.b.o.)*, (ii) intermediate *(m.b.o.)* and (iii) higher *(h.b.o.)* ;

(*d*) other forms of post-primary education.

Types (*b*) (i) *(l.a.v.o.)* and (*c*) (i) *(l.b.o.)* are those which cater for continued education pupils ; it is estimated that they will be attended by about 50 % of pupils in a given age group. In order to ease transfer and to help pupils to select the right course, the following curriculum is common to the first, or "bridge" year in both types of school.

Subject	Weekly periods (50 minutes)
Mother tongue	4
Modern languages	2
History and geography (including the highway code)	2
Mathematics (including arithmetic)	3
Natural science	2
Music	1
Art (drawing)	2
Manual skills *	4
Physical education	3
Study periods	2
	25

* 8 periods in elementary technical and elementary home economics schools, making 29 periods in all.

For those who, after this bridge year, continue to follow the *l.a.v.o.* route, the basic curriculum remains the same, with extra periods being added for most subjects and the introduction of social studies for 2 periods, bringing the weekly total to 42 periods or 35 hours. To an increasing extent, however, *l.a.v.o.* schools have either been incorporated in, or have been combined with elementary vocational and technical schools, which offer 3 or 4-year courses in one more of the following broad vocational sectors : industry, home economics, agriculture, artisan crafts, the service trades, (e.g. catering), and commerce.

The curriculum for the final year of the 3-year course has two main elements, general and technical. The former contains the same subjects as the preceding 2 years (described above) and occupies about half the weekly timetable ; the latter consists of vocationally directed practical work with related theory, which varies according to the trade-bias of the course. The general-vocational balance remains broadly the same in the final year of the 4-year course. Both courses make provision for the addition of a number of optional periods.

Two new forms of elementary vocational education have been developed in recent years : individual education *(i.t.o.)* and individual home economics education for girls. They are designed to cater for boys and girls of low, but not especially subnormal ability and for those who, for a variety of other reasons, have not laid an adequate foundation of elementary education. They therefore receive pupils who have needed to repeat grades in the elementary schools, the children of migratory workers, and such pupils from the special schools for the educationally retarded and subnormal and the physically handicapped as are thought capable of benefiting from the course. The balance of the curriculum is broadly the same as in the elementary vocational schools, but great care is taken to create a teaching situation appropriate to these young people's special needs and difficulties. Teaching groups are small (15 is the recommended maximum), so that the teacher can give individual care to each pupil. In the general subjects material related to everday life and to young people's interests in used, while in handicrafts and physical education, individual freedom of expression is encouraged. The problems arising naturally in the course of the vocationally-related practical work are used to revive interest in reading, writing, and calculations. Whenever possible, the time spent in practical rooms and workshops is not so much occupied in technical exercises as in producing finished articles which are of real use to the pupils, to their families, or to the charitable and social institutions with which the schools are encouraged to associate themselves.

It should be stressed that, throughout this large elementary vocational sector, certain general objectives are being firmly pursued. The first is the broadening, raising and strengthening of the base of general education. The second is the progressive elimination of narrow, premature training for a specific trade or employment. In tune with the more general needs of the modern economy, these schools aim to prepare young people for employment by introducing them progressively to a general appreciation of basic industrial theory and practice, using the vocational subjects to stimulate their interest, to motivate them to better achievement, and to diagnose their developing aptitudes as a basis for vocational guidance.

To this must be added the growing trend towards the creation of larger schools, which will offer more than one level of vocational and general education, or preparation for a wider range of occupations in the same institution. It is hoped that this, together with the "bridge" year, will widen pupils' range of choice and facilitate transfer from one course or level to another as their aptitudes and abilities develop.

Norway

Norway is in transition from a 7-year (7-14) to a 9-year period of compulsory schooling. The 7-year period became compulsory in 1889 ; in 1954, experiments in schools, including the voluntary extensions of schooling were both permitted and encouraged by an Act of Parliament. In 1959, the Primary Schools Act, which made arrangements for local extension of compulsion, stated that "the local authority may, on the recommendation of the School Board, decide to introduce a (further) voluntary school year ;" and that "the local authority may, on the recommendation of the School Board, and with the agreement of the Ministry, decide to oblige pupils to attend... for 9 years".

In the transitional period, which will last well into the 1970s, Norwegian children will, dependent on local circumstances, follow one of three possible routes.

(*a*) A basic 7-year course in the traditional elementary school *(folkeskole)*. This may be continued in a continuation school *(framhaldskole)* offering general education with some instruction in practical subjects. Courses may vary from 12 weeks to two years full time or 3 years of part time evening attendance. Generally they are equivalent to one school year. Local authorities have the power to make the first year of continuation school compulsory for all pupils that leave the 7-year primary school without proceeding to further education. About half the authorities in the country have done so, but with the gradual introduction of routes (*b*) and (*c*), the continuation school is going out of existence.

(*b*) A compulsory 9-year course, consisting of :

(i) 6 years' elementary school *(barneskole)*, plus
(ii) 3-year lower secondary *(ungdomskole)*. This latter has been formed by amalgamation of the two former types of secondary school (the continuation school and the 3-year lower academic school *(realskole)*).

(*c*) A 7 + 2-year variant of (*b*) ; this is more popular in thinly populated rural areas.

Continued education pupils are, therefore, to be found in all three types. The child following *route* (*a*) will have shared in the common curriculum of the elementary school. The subjects are religious instruction, mother tongue, home environment, history, geography, nature study, arithmetic, writing, art, music, handwork, physical education and English. His studies will lead to a final examination which includes written papers in mother tongue, arithmetic and sometimes English.

If he goes on to continuation school, he will have a basic group of compulsory subjects which includes practical work and theory, mother tongue, arithmetic and book-keeping, social studies and hygiene. The course is examined by the local authority and success may lead, under certain conditions, to various higher courses of education.

The curriculum for routes (*b*) and (*c*) is shown in the following table :

Lower-secondary (ungdomskole)

Subject	7th class	8th class with 9 hours of optional subjects	9th class with 20 hours of optional subjects
Mother tongue	5	4	4
Mathematics	4	5	5 (2) (0)
Religion	2	2	2
Social studies	5	4	5 (2)
Natural science	4	4	5 (2)
English	4	4 (0)	4 (0)
German	—	5 (0)	5 (0)
Music	2	2	2
Physical education	3	2	2
Art	4	2	2
Home economics	3	2	—
Optional subjects	—	— (5-9)	— (5-20)
Total weekly hours	36	36	36

These top classes are maintained unstreamed, with elective courses in various subjects. The main differentiation into theoretical and practical lines is postponed to the 9th year. The differentiation is worked out in classes 8 and 9 on the basis of subjects, with choice of one or two foreign languages, and courses offered at three levels of difficulty in English, two in German, three in Norwegian and three in mathematics. Only a small proportion (usually about 10 %) do not choose one foreign language. It would appear that children are reasonably realistic in choosing the level at which they will study a subject, although, as they move from year to year, there is a tendency for them to opt for a higher grade than the one chosen in the previous year.

Alternative timetables are shown in brackets in the table above. In the 8th class, those who do not choose German may have extra Norwegian (1), extra physical education (1), and handwork (3). Those who do not continue with English can give the 4 periods to practical work, home economics, free activities, vocational guidance, workshop practice or works experience in a firm. The 9 "free-choice" periods can be given to any subjects offered by the school.

In the 9th class, there is a reduced common core, with the remaining periods being grouped into 6 main lines : general-theoretical, fishing and seafaring, home economics, commercial, agricultural and industrial. The general-theoretical line prepares for entry into upper secondary education : two foreign languages must be taken, and the elective subjects must be studied at the higher grades. In the other lines, 14 of the 36 timetable periods are allocated to practical subjects.

Sweden

Under the 1962 School Law, school attendance was extended to 9 years (i.e. 7-16) for all children. The new comprehensive school *(grundskolan)* is common to youngsters of primary and lower secondary school age. The new system is gradually being introduced and will be completely established during the school year 1972-73.

The comprehensive school is divided into 3 departments. It is in the upper department *(hogstadiet)* which contains the whole 13-16 age group where "continued education" pupils are to be found.

Until they reach the upper department, all pupils in a class are taught all their subjects by a class teacher ; when they enter grade 7 (the first in the upper department) they are grouped in the same classes as they were in the middle department but they face two major changes of regime :

(*a*) they get new teachers who are specialised by subject and are called "subject teachers" ;

(*b*) in addition to a compulsory care curriculum, they are now given the choice of a number of optional subjects (5 weekly periods).

This pattern is modified in grade 8, when the number of optional periods is increased to 7 and English is no longer compulsory. In grade 9 pupils select one of 9 courses in which to spend their final year.

Great emphasis is placed on freedom of choice of these optional subjects and alternative courses. Article 25 of the 1962 Education Act stipulates that they are to be decided on by the parents in consultation with the pupil after information has been provided by the school. This is a deliberate reaction against, and in marked contrast to allocation by some form of selection, which characterises certain "vertical" systems in other countries. It is intended to be "a fundamental exercise in the principles of democracy", by giving each pupil and his parents equal rights of choice. If it is to function effectively, both parents and children need to exercise good judgment and foresight. This in turn underlines the need for good vocational guidance and good relations between home and school. As the report to OECD states "much remains to be done to solve this crucial problem".

Despite the appearance of optional subjects in grade 7, the unity of the class group is maintained. Pupils are neither assigned to classes according to their choice of optional subjects nor on the basis of their previous class marks. In the 7th and 8th grades, classes in English and mathematics are divided according to the type, depending on whether the options chosen show a theoretical or a practical bias. No such division is made for the mother tongue, but in grades 7 and 8, one of the weekly periods in this subject is devoted to a review of the subject matter in order to reinforce the pupils' knowledge ; for this each class is divided into two groups. There is also some "setting" of pupils on the basis of their choice of foreign languages, the stage at which their study is begun, and the level of proficiency reached.

Within the common core, pupils in grade 8 have some choice as to how they spend the 4 weekly periods allotted to music, handicrafts and art .They may choose to divide the time between two of these subjects and neglect the third, if they wish, and so have a chance to follow their special interests.

All pupils in the 8th grade must take part in "practical vocational guidance", regardless of their options or the course to be chosen in grade 9. After preparatory work in their civics classes, they spend periods of up to 3 weeks at different places of work to get direct experience of working life. There are plans to delay this experience until the 9th or final year.

Distribution of weekly periods in grades 7 - 9

Subject	Grade			
	7	8	9g, 9h 9m, 9s	9mek, 9ha 9ht, 9pr
Compulsory subjects				
Mother tongue	3	3	5	3
Mathematics	4	4	4	
English	4			
General subjects				
Religion	2	2	1	
Social studies				
Civics	1	2	2	2
History	—	3	2	
Geography	—	3	2	2
Science				
Biology	3	0	2	2
Chemistry	—	2	2	
Physics	2	2	2	
Music	2 (1)	4	4	2
Art	2			
Handicraft	1 (2)			
Domestic science	3			
Physical education	3	3	2	2
Practical vocational guidance				
Optional subjects	5	7	7	
	35	35	35	22

As the above table indicates, the 7th and 8th grades bring only minor variations to the common core. The optional element is nevertheless important as a means of meeting the widening spread of pupils' interests, aptitudes and dawning vocational aspirations. Thus, in the 7th year, three of the 5 optional groups include a second foreign language, combined, in varying proportions, with extra Swedish or mathematics, or with typewriting. In a fourth group, the whole time is spent on handicrafts, while a fifth allows handicrafts or typewriting to be combined with either extra Swedish or mathematics.

In the 8th grade, the fan of options widens to 9. Three have a strong modern language element ; two feature technical and commercial studies (with languages). The remainder offer varying combinations of domestic science, home nursing, handicrafts, typewriting and workshop studies, music, art and modern languages.

Grade 9 is divided into 5 sections. In all but the first, pupils may choose between a theoretical or a more practical course.

1. Course 9 g. Direct preparations for upper secondary education.

2. Course 9 h. Humanities.

   Course 9 pr. General-practical.

3. Course 9 t. Technical.

   Course 9 tp. Practical-technical.

4. Course 9 m. Mercantile.

   Course 9 ha. Commercial.

5. Course 9 s. Social-economic.

   Course 9 ht. Domestic science.

The five courses listed first in each group are, in principle, designed to open the way to further studies in upper secondary and other further full-time education. As will be seen from the table above, the compulsory common core of academic subjects continues to take up two thirds of the 9th-grade programme for these courses. In the 4 practical courses, however, the common core is considerably reduced, with pupils spending two thirds of their time in pre-vocational subjects clearly relevant to their life and work as young adults, as the following table shows :

Pre-vocational subjects in 9th-grade practical courses

Course	Subject	No. of weekly periods	Total weekly periods
Mechanics course (9 mek)	*Vocational work* : bench work, machine work, hot machining, practical training.	17	
	Vocational theory : tools, machine tools, machine parts, materials, cutting, welding and soldering, accounting, material handling, production technique, information, workshop hygiene.	5	22
Commercial course (9 ha)	Swedish, practical course	2	
	Commercial mathematics	4	
	Commercial theory	2	
	Book-keeping	3	
	General material theory	2	
	Typewriting	3	
	Shop or office work	6	22
Domestic science course (9 ht)	Home and furnishing	4	
	Economy and work organisation	2	
	Food and cooking	7	
	Textiles and needlework	5	
	Child and family care	4	22
General practical course (9 pr)	Vocational work : store work, goods office work, bench work, machine work, hot machining, maintenance, care of motors, care of home and clothes, cooking.	18	
	Vocational theory : tools, machine tools, materials, reading plans, accounting, vocational hygiene, practical vocational guidance.	4	22

Swedish educationalists stress that, despite the strong pre-vocational flavour of these courses, they are not designed to provide direct training for a specific vocation. Their purpose is rather to offer a broad basic training which covers broad sectors of working life.

Both the range of practical streams offered and their content are flexible and capable of modification to meet the practical experience of the pupils and the varying occupational conditions of different districts. For example, a forestry course may be offered. Adaptation to local conditions, however, is not allowed to distort the broader vocational aims of any practical course.

One further possibility for 9th-year pupils should be mentioned. Those who have made a definite choice of career by the end of the 8th grade may spend their final compulsory year in a vocational school, in a workshop or other place of work. Permission must be granted by the local school board in each case.

An acceptable level of performance in these 4 practical streams qualifies pupils for direct admission to various occupations or to further training in part-time or, in some cases, full-time vocational and professional schools.

Each of the 25 Swiss cantons has sovereign rights in the field of primary and secondary education and has complete independence in the organisation and control of its schools. There are, therefore, 25 school systems, which differ from each other in many ways, including the starting age and duration of compulsory schooling, and in the age and extent of transfer from elementary to secondary education.

Compulsory schooling begins at the age of 6 or 7 and lasts for between 7 and 9 years ending at the age of 15 in most cantons. For the first 3, 4, 5 or 6 years all children attend a common elementary school. The ablest pupils then transfer to secondary education and generally follow one of three curricular tracks, humanities, sciences and business. Selection, again depending on the canton, may be by examination, although an observation and guidance cycle has been instituted in certain cantons (e.g. Geneva, Vaud) as part of an attempt to open secondary education to more children and to broaden the field of recruitment for higher education.

The majority of children, however, continue at the elementary school until the end of the compulsory period. Here, all cantons have made and are making a considerable effort to adapt the education given to the requirements of modern life. Not only has the length of compulsory schooling been extended in most cantons, but the number of weeks of attendance in each year has been increased. Terminal classes, with more optional subjects (including languages), and with a strong element of guidance and pre-vocational training have been developed.

An interesting example of this "terminal" education is provided by the "Work Year" *(Werkjahr)* in the Canton of Berne. This is available for both boys and girls in the final, or ninth year of compulsory schooling.

As the following tables of weekly time and subject allocation show, the curriculum is predominantly practical.

The "Work Year" (Werkjhar) — Berne Canton

Table of subjects and weekly time-allocation

Boys		Girls	
Subject	Periods	Subject	Periods
1. *Workshop education*		1. *Education for work*	
Tools, materials, processes and working conditions	31	Employment-orientated practical work (tools, machines, materials, processes, and working conditions).	11
Technical drawing	3	Needlework (with machines)	10
		Cookery and domestic work	8
2. *General education*		2. *General education*	
Mother tongue (oral)	2	Mother tongue (oral)	2
Arithmetic, geometry	2	Arithmetic, geometry	2
Civic education	1	Civic and social education	2
Related practical work	1	Physical education	2
Physical education	2	Helping to prepare, serve and clear away the school lunch	3
Total	42	Total	40

At first sight, the regime would appear to be heavily weighted on the "education for work" side, with some 75 % of the time being devoted to it, leaving only 25 % for general, personal and social education. In practice, however, there is much planned interpenetration between these two major compartments of the work. Indeed it would be not too much to say that the curriculum is treated as an integrated whole. For both boys and girls, Section I is not treated as preparation for any specific employment, but rather as a carefully planned and progressive introduction to the technology of work, with emphasis on the design and function of hand and machine tools, the nature of the materials used and the aesthetics of the finished product. Practical work is devised and taught not only to encourage the acquisition of a wide range of physical and manipulative skills but also to refresh and improve mathematical and scientific knowledge in a purposive context. It is also aimed at producing objects which are not merely "exercises", but useful and aesthetically pleasing articles. These, in turn, are linked with the pupils' social and civic education. Toys, games

and small furniture are produced for and delivered by the pupils to nursery schools. Bird boxes are made and delivered to a mountain nature reserve on a school expedition to learn more of the varied fauna and flora of the countryside. Although the constituent elements of this curriculum are by no means unusual in this type of continued education, the extent to which they are welded into an all-round preparation for work and life which overcome the traditional divisions between subjects, and between vocational and general education is particularly suggestive.

Though not necessarily representative of the "terminal" education provided by the various cantons, this "Work Year" does indicate that the education authorities, while seeking to open opportunities for a more varied secondary education to an increasing proportion of young people, do not regard them as a temporary and obsolescent feature of their educational systems. Rather, would they claim, that by focussing resources and attention on their special characteristics they have been able to devise a form of education which is not regarded as inferior to others for the same age-group. Its broadly and humanely conceived pre-vocational training, allied to careful guidance based on the aptitudes and interests thereby revealed is seen as a realistic response to economic and social realities.

Turkey

The law of 5 January 1961 made education compulsory from age 6 to the completion of the 14th year of age. There are, however, many children for whom no school facilities as yet exist, despite substantial recent progress.

Those pupils who do not continue after 5 years of elementary schooling, may be compelled to attend supplementary basic courses or classes up to the end of the 14th year, which must be organised by the State or by the local authorities.

The supplementary basic courses are provided for pupils of compulsory school age who have completed 5 years of elementary schooling but have no opportunity for continuation. These courses aim to build upon elementary education, to broaden and deepen knowledge of society, of the responsibilities, of nutrition, health and hygiene, and to foster reading and spoken language skills. The following subjects are offered, each for two hours per week : social studies, Turkish, mathematics, nutrition, health and hygiene.

A short-term primary education programme has also been mounted for children of compulsory school age who have never attended school. Within this programme, the 'A' course gives instruction in reading and writing and in the subject matter of the first three grades of the elementary schooling. If they then pass an examination, they proceed to a 'B' course which gives a condensed version of the fourth and fifth years of the regular primary course. Classes are held for a minimum of 8 hours per week.

United Kingdom (England and Wales)

School attendance is compulsory for 10 years (age 5 to age 15). It is intended to raise this to 11 years in 1972-73.

The provision of public education is in the hands of 162 local education authorities, which are the councils elected by each county and county borough. Under the 1944 Education Act, it is the duty of each local education authority to secure that there is efficient education — at three progressive levels, primary, secondary and further — to meet the needs of the local population. Each authority enjoys a large measure of autonomy in the way it interprets this broad prescription. In each school, moreover, the subjects and time allocations in the curricula are substantially in the hands of their Heads. What follows, therefore, is a summary of the general pattern, with significant variations noted.

Although the age of transfer from elementary (primary) education to secondary education may vary from 7 to 12, it is at age 11, after 7 years in a common primary school, that the majority of local education authorities arrange for this transfer to take place. Selection procedures vary, but the general trend is towards greater reliance on the opinion of primary teachers and parents' wishes, and less on a selection examination (the "11 +").

Secondary education is provided in 4 main types of school :

(*a*) grammar school,

(*b*) secondary technical school,

(*c*) secondary modern school,

(*d*) comprehensive school.

Since 1965, it has been government policy to end selection at 11 and to eliminate separatism in secondary education by the establishment of more comprehensive schools of various types. At the time of writing, schemes of secondary school reorganisation on comprehensive lines have been implemented, or approved for implementation, in the areas of two thirds of all local education authorities.

Secondary education therefore faces a long period of transition. For some years, the great majority of pupils who leave at 15 will continue to enter secondary modern schools, but the present substantial numbers attending some form of comprehensive school will continue to grow as the new policy is implemented. The comprehensive schools, whether new foundations, or varying combinations of types (*a*), (*b*) and (*c*), will be larger schools, generally offering a wider range of courses than the existing secondary modern schools. The present tendency for secondary technical schools to lose their identity as separate institutions, and to become components of some type of comprehensive school will be accelerated.

Many secondary modern and most comprehensive schools offer from one to three years of schooling beyond the compulsory period, thereby providing short, intermediate and long secondary courses under one roof or in one institution.

Because of the substantial curricular autonomy enjoyed by each school, it is not possible to provide a nationally valid analysis of the subjects and the time given to each in the final compulsory year of lower secondary education. However, enquiries made in connection with two reports on the education of the young school leaver, issued in 1963 and 1968 respectively, have produced a general picture of what these boys and girls were doing near the end of their time at school.

The first of these enquiries [1] produced the following picture of the subjects most frequently taken, and the average time allotted to them, in the fourth-year curriculum for boys in 117 and the girls in 115 secondary modern schools in England and Wales in 1961. (The proportions of girls', boys' and co-educational schools in the sample was approximately 1:1:3.)

Subject	% of weekly timetable		Approximate weekly hours	
	Boys	Girls	Boys	Girls
1. *Humanities*				
Mother tongue	20	20	4¾	4¾
Religious instruction	6	6	1½	1½
History	6	6	1½	1½
Geography	6	6	1½	1½
Other subjects	1	1	¼	¼
	39	39	9½	9½
2. *Science and mathematics*				
Science	6	5	1½	1¼
Mathematics	18	17	4½	4¼
	24	22	6	5½
3. *Practical subjects*				
Art and music	9	13	2	3
Physical education	10	8	2¼	1¾
Wood and metal work	12	—	3	—
Technical drawing	6	—	1½	—
Housecraft and needlework	—	18	—	4½
	37	39	8¾	9¼
Combined Total	100	100	24¼	24¼

The most common alternative subjects were shorthand and typing (20 % or 4 ½ hours) for girls, rural science (3 % or ¾ hours) for boys, and a foreign language (11 % or 2½ hours) for boys and girls.

1. Newsom Report. op. cit, p. 237.

The approximative weekly hours shown above exclude time spent in assembly, registration, meal and recreation breaks. Lesson periods varied from 30 to 45 minutes. It should be stressed that the average time allocations shown concealed wide and important variations both between schools and between one class and another in the same school. Despite the degree of curricular autonomy, however, there was in practice a greater measure of uniformity in the subjects offered than in the time allotted to them.

Among the significant differences not revealed by these average figures are :

(*a*) that boys in boys' schools spent an average 1 ½ hours per week more on the science and mathematics group than did girls in girls' schools, who in turn spent correspondingly more time on the practical group. In co-educational schools, this difference, though it still existed, was roughly halved ;

(*b*) that subject and time allocation often reflected the teachers and accommodation available rather than the curricular ideals of the Head ;

(*c*) that there was no positive correlation between the balance of subjects and time allocation on the one hand and the ability of the pupils on the other.

A more recent picture [1] of the subjects most frequently taken by 15-year old leavers in their last year at school emerges from the replies to a questionnaire given by a sample of 13-16 year olds who intended to leave, or had left school at the end of the minimum compulsory period. They were drawn from 111 schools, mainly of types (*c*) and (*d*).

Subject	% who were taking, or who had taken the subject in their 4th year	
	Boys	*Girls*
Geography	88	88
History	85	88
Science, chemistry, physics, biology, rural studies, nature study	96	87
Mathematics	99	99
Woodwork, carpentry	75	1
Metalwork, engineering, workshop practice	53	1
Technical drawing	69	2
Housecraft, cookery, mothercraft	4	94
Needlework	—	92
Commercial subjects, shorthand, typing	2	17
Mother tongue	99	100
Foreign languages	13	23
Art and handicraft	88	88
Music	66	85
Physical education and sport	97	94
Religious education	89	92
Current affairs, social studies, civics	29	28

While the 6-year interval between the studies on which these two preceding tables are based has not markedly affected the subject balance of the fourth-year curriculum, it has been a period of experiment and development both in the content of its constituent subjects and in their interrelations. Much of this has been initiated or encouraged by the National Council for the Curriculum and Examinations, working in co-operation with a number of independent research bodies, which has undertaken development projects designed to promote relevant and useful courses for the young school leaver. The physical sciences, mathematics, and social studies have been among the themes chosen [2]. The general trend of their suggestions has been towards greater practical participation and personal discovery by the individual pupil, and towards closer relationship between school work and the realities of the modern industrial and social scene. Although these suggestions are not mandatory, many schools, in addition to those directly involved in the experimental projects, have been influenced by the Schools Council's work. This development is expected to accelerate as the date for extending the compulsory school period approaches.

1. *The Young School Leaver*, Schools Council, H.M.S.O., 1968.
2. See *Science for the Young School Leaver ; Mathematics for the Majority ; Society and the Young School Leaver* (Schools Council, H.M.S.O., London).

CHAPTER 3

PROGRAMMES OF CONTINUED EDUCATION - SOME SIGNIFICANT FEATURES

1. *Curriculum*

(i) *Basic general education*

Most of the programmes described in the previous Chapter show either explicitly or by implication, a common concern for consolidating, supplementing and extending pupils' basic general education. The discussions at the Interlaken Seminar demonstrated that, although the interpretation of "basic" and "general" might differ from country to country, there was broad agreement that one of the main weaknesses of many continued education pupils was their indifferent grasp of the fundamental skills of literacy and numeracy. Without these skills, they were unable to take advantage of many aspects of school life, and would enter adult life with a serious and possibly permanent handicap.

In all contined education programmes, the improvement of pupils' command of the *mother tongue* is stressed, and receives a substantial allocation of teaching time. Varying degrees of emphasis are given to the component elements of language study (e.g. pronunciation, grammar, vocabulary, study of literature etc.), but the substitution of the title "acquiring the means of expression" for "mother tongue" in the programme for the terminal practical classes in France is perhaps symptomatic of a changing approach to language teaching which is by no means confined to France. For pupils often handicapped by environmental difficulties and psychological inhibitions, the acquisition of confidence and competence in speaking their native language is generally accepted as essential to improving their whole attitude and performance. "There is no gift like the gift of speech ; and the level at which people have learned to use it determines the level of their companionship, the level at which their life is lived [1]."

An interesting example of the frank recognition of the need to improve pupils' ability to communicate in their own language is to be found in the programme for the "Work Year" of the Berne Canton in Switzerland, where work in the monther tongue is specificially designated as oral.

On the role of *numeracy* in continued education there would appear to be general agreement that it is essential, but a considerable spectrum of opinion on the means by which it can be encouraged. The Interlaken Seminar favoured a modest target of improving pupils' grasp of arithmetic, calculations and measurement. The recommended or mandatory curricula of some countries specify mathematics, and make particular mention of algebra and geometry. Closer linkage with practical and vocational subjects is generally preferred to artificial and purely theoretical problems. The relevant section of the scheme of study for the terminal practical education in France bears the title of "mathematical and logical processes", and is explicitly linked with the work in the science and technology section. A usefully comprehensive statement on the role of mathematics in continued education occurs in an English study of mathematics for the young school leaver [2] :

"Mathematics can play a significant part in helping these young people, who have to face the world with their intellectual limitations sometimes combined with adolescent and other tensions, to stand fairly and squarely on their own feet. Mathematics can help them to make decisions for themselves based on some degree of reason ; it can help them to distinguish between soundly presented data and mere speciousness in argument and presentation so apparent in current advertising techniques levelled at the teenage population. In short as an integral part of their general education, their mathematical education should enable them to cope as confidently and effectively as possible with living in an age which is rapidly becoming more dependent on mathematics and technology. This is by no means the same as training them to be mathematicians."

The clear statement in the final report of the Interlaken Seminar that "it is impossible to understand the modern world without an introduction to the *natural sciences*" finds a positive, if varied response in member countries' continued education programmes. In nearly all, science subjects are included in the compulsory or generally accepted core of the curriculum. In some cases, this represents an important extension of previous primary or elementary curricula which, although

1. Newsom Report, opt. cit., p. 118.
2. England : The Schools Council Working Paper No. 14, *Mathematics for the Majority*, p. 36.

containing a subject generally described as nature study, concentrated on the basic skills and the humanities. The other physical sciences and their technological applications were generally reserved for those pupils pursuing longer secondary courses, or engaging in technical and vocational training and education. Looking at present curricula, the scientific element appears in various guises. In those where the specific subject nomenclature is employed (e.g. Denmark, Belgium, the Federal Republic, Sweden), biology and physics are most frequently prescribed, although in some cases where optional alternatives are possible in the final years, one or the other may be dropped, or replaced by pre-vocational studies with a scientific content. The broader title of science or natural science is used in Norway and the Netherlands, while in England, where there are no mandatory curricula, the scientific sector of the curriculum may be labelled chemistry, physics, biology, rural studies, rural science or nature study. In Italy, where the inclusion of "Observation and the elements of natural science" in the curriculum for all lower secondary pupils is an innovation, the intention is to give a broad introduction to biology, physics, chemistry and geology based on the pupil's own observations of natural phenomena. Another approach is typified by the subject "The scientific basis of the modern economy" in the scheme of study for the Polytechnic Year in Austria, which aims to develop pupils' insight into the physical, chemical and biological processes which they meet in everyday life, and to demonstrate their application in the household, in industry and in agriculture. This emphasis on the everyday manifestations of applied science is also recommended in the French programme for terminal practical classes, where science and technology form a combined area of study.

It is not surprising that an international gathering like the Interlaken Seminar considered that, "in the modern world where distances count for almost nothing, and where it is essential to understand, as far as possible, the manner of life in countries other than one's own, a knowledge of *modern languages* is of considerable importance to many". In effect, they were recommending that the acquisition of such knowledge was essential to the young European of to-day and to-morrow. They came down firmly in favour of giving priority to spoken language which, given the use of modern methods, was within the reach of pupils of only moderate ability. This contention is borne out by the fact that the majority of member countries include a modern language in the compulsory sector of their continued education programmes. In some cases (e.g. Belgium, Switzerland, Wales and Ireland) this has, for a variety of reasons, to take the form of a second national language. In the Scandinavian countries, a modern language becomes optional in certain 8th and 9th-year "practical" or continued education classes. In France it does not figure in the scheme for the practical terminal classes, while in England, a modern language is taken by only 23 % of girls and 13 % of boys who leave at the end of the compulsory period.

(ii) *Civic and social education*

"Since the young people who are receiving continued education are all future citizens, civic and social education will be an integral part of the programme." In these words, the Interlaken Seminar gave clear recognition of the need for positive and realistic education for citizenship in a complex, changing and increasingly interdependent world. Their recommendation finds varying echoes in the curricula of many member countries, all of which include compulsory subjects which appear to pursue this objective. There is a clear tendency, as continued education pupils near the end of their compulsory schooling, for history and geography, treated as separate subjects in earlier years, to be replaced by wider, cross-disciplinary and more contemporary studies, variously labelled civics, current affairs or social studies, whose subject matter may or may not include a specific reference to history and geography. One example is to be found in the scheme of study recommended for the subject "Social and economic studies" in the Austrian Polytechnic Year. Against a background of 20th-century history, the teacher may make his own selection from a wide range of socio-economic topics in the light of the needs, interests and abilities of his pupils. These topics include various aspects of Austria's recent political, social and economic development, current economic structure and problems, and social co-operation and conflict at national, European and world level. The subject "World knowledge" *(Weltkunde)* is included in the curriculum for the 9th year of *Hauptschule* in Hesse (Federal Republic), and contains elements of history, geography and social studies. In the voluntary 8th to 10th years of the main school in Denmark, the subject "General knowledge" draws topics from history, geography, biology, vocational guidance, study of individual occupations, civics and teaching about the family. In England, where individual schools and teachers have considerable freedom to select the subject content appropriate to their pupils, the traditional subject labels of "History" and "Geography" may often cover a wide variety of contemporary social studies which, under the impetus of the Newsom Report and subsequent publications of the Schools Council are rapidly gaining ground as studies in their own right. The section called "Investigations" in the French terminal practical classes is similarly intended to take various aspects of modern society as its subject matter. The specific linking of geography with the

Highway Code in school curricula in the Netherlands draws attention to an aspect of to-day's motorised society likely to be of interest to most young people.

The great majority of member countries have therefore included some form of civic and social studies in their programmes for the young school leaver. But civic and social education is not necessarily guaranteed by curricular recognition, and depends equally on the methods of teaching and the extent to which the pupils themselves are actively involved. Some of the experiments in this direction will be referred to in Section 2 below.

(iii) *Moral and religious education*

Although each country has its own interpretation of the school's role in moral and/or religious education, most member countries include it as a compulsory element in their programmes. The Interlaken Seminar unanimously agreed "that all teachers openly or otherwise, consciously or unconsciously, influence the pupils in their charge and that in the field of moral and religious education, nothing has so much influence as personal example. It follows then that it is of the greatest importance for teachers to have a personal integrity which is not only irreproachable in all respects but is also obvious to the pupils... This is a mighty challenge which can only be met with any reasonable prospect of success if the teacher continually remembers the responsibilities that his privileged position enables him to accept. To exert the greatest possible influence, moral or religious education must permeate the whole structure of the teaching syllabus... On the one hand, pupils must have the impression that they are free to turn to wise advisers whenever they have personal problems, and on the other they must become increasingly alive to the fact that the dignity and freedom of mankind are ultimate values. Here again, education must be an introduction to life."

(iv) *The vocational aspect*

The one clear fact about the last years of the continued education pupil's schooling is that they are the immediate preliminary to employment. The pupils know it and they look forward with varying degrees of expectation to getting a job and earning money, with all that it implies for becoming "grown-up" and increasingly independent. This tends to sharpen the tensions between "school" and "life", with the former seeming to become more and more irrelevant to the adult world when seen through the impatient eyes of youth. Only to a minority is prolonged traditional schooling acceptable because of family convention and an appreciation of its relevance to future professional status, security and rewards.

Allied to this is the widespread conviction among many educational policy-makers and educationists that job-orientated practical work is a valuable means of sustaining or even re-awakening the interest of the less gifted pupil in these final years of compulsory schooling. In some cases this has been reinforced by the labour market's demand for a supply of more or less skilled juveniles, mainly in the manual occupations, so that there seem to be strong arguments in favour of giving a definite vocational flavour to the shorter courses of post-primary education. In their various ways the Netherlands, Belgium, Luxembourg and Italy embodied this thesis in their pre-reform school systems. It was equally firmly resisted by other countries (e.g. the Scandinavians), who held strongly to their convictions that the period of education was too short, in relation to the duration of subsequent working life, for the precious opportunities for life-orientated general education to be reduced by a premature preoccupation with training in vocational skills. In a sense, those two points of view respectively exemplified what might be called the economic-functional and the liberal/general theses of terminal elementary education. One need hardly add that they were rarely so sharply differentiated in practice.

The forces of economic and social change have tended to bring about a conciliatory modification of both positions. The need for a better-educated and more versatile labour force has tended to work against the premature and narrow orientation of the final years of compulsory schooling towards a specific level or type of employment. On the other hand, to young people kept longer in school, the prolongation of a general (in effect a predominantly literary) education has seemed less and less attractive.

Thus it is that the protagonists have increasingly come to advocate a longer and broader basis of general education for all pupils in the lower secondary age-group, while retaining, as far as possible, the motivational value of the work-orientated outlook. The general/liberal enthusiasts, on the other hand, have come to appreciate the demand of young people and their parents for an education which seems to them to be a realistic preparation for life after school, and one in which verbal facility and a capacity for handling abstractions are not the sole criteria of progress or educability.

In most continued education programmes, there is, therefore, a substantial pre-vocational element, in which three broad strands may be identified :

— a more or less explicit orientation towards a particular group of occupations ;

— an emphasis on developing attitudes, knowledge and skills which are broadly relevant to the pupil's future working life, but are not specific to any group of occupations ;

— provision within the school programme for pupils to gain first-hand experience of the work situation.

In practice, these strands are not mutually exclusive. One or more can be found in virtually all of the programmes described in Part II, Chapter 2 above.

(v) *Orientation towards a particular group of occupations*

In several countries, the pupil approaching his final years of compulsory schooling is offered a curriculum which, though still dominated by a core of general subjects, has nevertheless a perceptible pre-vocational flavour. In this, the basic intention would appear to be to combine an improved and extended base of general education with the opportunity for pupils to "taste" a variety of subjects and skills which have a clear relevance to specific sectors of working life. This pre-vocational sector is part preparatory, part diagnostic and part motivational. Preparatory in the sense that the subjects and skills learned will be useful in the pupil's future job ; diagnostic in that the pupil's performance in them will give significant indications of his interests and aptitudes ; motivational because, in the pupil's eyes, they may seem both practical and realistic because of their relevance to life after school.

Before their relatively recent reforms of school structures, junior vocational schools were an important element in the post-primary education in Belgium and the Netherlands. These schools were often geared to preparing their pupils for entry into specific fields of employment, and their curricula contained a substantial element of relevant training. In Belgium, the progressive development of the lower intermediate school *(école moyenne)* alongside, and often merging with the former vocational schools has led to the emergence of curricula which, while reducing narrow and premature specialisation, retain much of their motivational attraction. Thus, after a common first year a pupil may, among other alternatives, choose to spend one sixth of his weekly timetable on one of two broad technical options, each of which contains at least three pre-vocational "lines", to which others may be added in the light of the school's resources and local circumstances. The subjects studied are largely common to each line, but the teaching is given a particular bias according to the line chosen. In the third year, one third of the timetable is given to those options, while the "lines" take on a more direct relationship to fields of employment. It will be noted that, for such a curriculum to be realised in practice the school, or local combination of schools, needs to be adequate in size and resources, to make the choice a reality.

A similar process of closer relationship between lower general and vocational schools may be observed in the Netherlands. After a first, or common "bridge" year, pupils follow curricula orientated towards one or more vocational sectors, with an increasingly explicit trade bias as successive stages of the course are reached. A significant difference is the assumption that for pupils with the lowest levels of attainment and previous educational handicap, a substantially greater proportion of the timetable will be devoted to the learning of practical, pre-vocational skills, with the objective of re-awaking interest and confidence in the general education sector of the curriculum.

An interesting example of a different approach is the programme for the voluntary 8th and 9th years in Denmark. With no tradition of junior vocational schools, the Danes have nevertheless appreciated the need for vocational "realism" if pupils are to be persuaded voluntarily to extend their schooling beyond the compulsory minimum. Here, students who have completed their 7th, or final, compulsory year may choose to spend nearly a quarter of their time on one of three groups of subjects, which may roughly be characterised as commercial, scientific/technological, and practical/manual in their vocational orientation.

The curriculum for the 9th compulsory year in the Swedish unitary school, with roughly two thirds of the time devoted to optional subjects with a clear vocational relevance in four of the nine courses available at this stage, shows the same recognition of the importance of vocational relevance. In the less mandatory and very much more flexible situation in the United Kingdom, a broadly common subject curriculum is followed by all pupils for the first three years ; thereafter those who have chosen to stay for a further two (including one voluntary) years may choose between curricula which are most frequently biased towards a group of industrial occupations (e.g. engineering) for boys, or towards nursing or secretarial work for girls.

In Italy where, before the emergence of the comprehensive middle school after the 1962 reforms, a variety of junior vocational schools characterised the post-elementary stage, the curriculum of the new comprehensive middle school appears to offer few concessions to the pre-vocational element. Only in the last year of the 3-year course does craft-work receive a marginal increase in the modest time-allocation given to it in the first two years. When the optional "after-school" element of the curriculum becomes more firmly established, it may be possible to offer a wider range of choice, and to add a more specific vocational orientation to the base of general education embodied in the main curriculum. The programme for the Austrian Polytechnic Year also makes provision for the addition of a number of optional subjects (shorthand, typewriting and foreign language), which can be accomodated within the timetable by a reduction in the time spent on the compulsory subjects.

Some implications of offering pupils a genuine choice of vocationally flavoured options should be noted. The first concerns the size of the school in which they are offered. If viable teaching groups are to be produced for, say, three options, then the number of pupils in each school year in which options are available will not fall short of 100, and must be correspondingly larger if more options are included. This, in turn would seem to require a minimum total enrolment of 300 in a 3-year school, of 500 in a 5-year school, and so on. Where the final year or years of the course containing the options extend beyond the minimum compulsory period (as in Belgium, Denmark and the United Kingdom), the size of the initial intake at the post-primary level may well have to be larger still unless the proportion of pupils staying on voluntarily is very high. The alternatives seem to be either the acceptance of smaller class sizes for the optional subjects, or combining pupils from different years in the same class.

The second and related implication concerns staffing, equipment and accommodation. Schools which have hitherto provided a general subject curriculum will need to recruit teachers of technical subjects and practical skills. Former junior vocational schools will on the other hand have to increase their complement of general subject teachers. Workshops, drawing offices, laboratories, typewriting rooms, domestic science centres and further general classrooms may have to be added to existing schools, or included in those which are newly built. With the accommodation will have to go the necessary equipment, which is often more expensive than traditional classroom furniture. The cost of these extra scarce resources, both human and material, can only be reasonably economic if they are used by adequate numbers of pupils to keep them fully employed.

These problems appear in their most acute form if each school is expected to provide pre-vocational options entirely within its own walls and from its own resources. If, however a wider view is taken, they may well be mitigated. A number of schools in an area may each offer only one or two options, in which they may specialise, with pupils either spending one day per week, or completely transferring to the school which offers the pre-vocational subjects in which they are interested. Schools may either be incorporated in, or sited adjacent to technical colleges or other vocational training establishments, whose specialist staff and equipment may then be available to school pupils on a part-time basis. It is significant that a number of countries are looking to co-operation of this kind to provide a wider choice of vocationally-biased curricula for continued education pupils. In Sweden, those pupils who have made a definite choice of career, by the end of the 8th grade may, with the permission of the local school board, spend their final year of compulsory schooling in a vocational school. In certain States of the Federal Republic, pupils in their final compulsory year in the main school *(Hauptschule)* attend a vocational school *(Berufsschule)* for one day per week. A similar practice of day-release from schools to colleges of further education is growing in popularity in certain parts of the United Kingdom, because of its frequently beneficial effect on the motivation and attitudes of the pupils concerned. It can also form a valuable bridge between compulsory schooling and post-school vocational education and training. For such experiments to be fully successful, there must be close co-operation between the institutions concerned, especially in the joint planning and execution of the curriculum. Both partners may have to modify their traditional approaches in order to devise a programme which, though it is provided in two institutions, has a unified objective, and in which there are strong cross-links between its general and pre-vocational elements.

(vi) *The development of attitudes, knowledge and skills which are relevant to working life*

While not all member countries would agree on the desirability or feasibility of including strand (*a*) in the curriculum in any of the forms described, the proposition that the last years of compulsory school life should contain practical elements of broad relevance to life both as a young worker and a young citizen appears to command more general assent.

In some cases this might take the form of a broader interpretation of handicraft, a traditional feature of many curricula. The syllabus of handicraft for boys in the Austrian Polytechnic Year

exemplifies this approach. "Pupils", it says, "should acquire the ability to make the simplest things used in everyday life on the basis of working drawings and without help." But the scheme goes beyond the familiar practical hobby interest to stress the need for a scientific understanding of tools and processes, the inculcation of economic and ordered attitudes to workshop organisation, and to experience of various social relationships in the working situation (e.g. individual work, team work and assembly line work). The "workshop education" section of the programme for the work year in the Berne Canton of Switzerland, to which 75 % of the weekly timetable is devoted, introduces pupils to a variety of tools, materials and work organisation, together with technical drawing, so as to give both broad preparation for the general field of manual work and to build the foundation of practical hobby interests. In Austria, the corresponding syllabus for girls is strongly biased towards household interests by contrast ; girls in the Berne "Work Year" have some practical preparation for employment in the needle trades and other factory work in addition to cookery and domestic work.

A different approach is to be found in the French scheme for the terminal practical courses. This is explicitly conceived as a general preparation for working life and not as training for a particular occupation. Two sections of the curriculum—small-scale construction work, and systematic educative exercises—are designed to enable pupils to acquire versatile working skills. There is a substantial element which is common to both boys and girls, which covers practice with light tools, small soldering, electrical apparatus, etc., complemented by special schemes for each sex ; the boys work in metal, wood and building materials, and with machines, while the girls have tuition in fabrics, needlework, cooking and the use of domestic appliances. The type of educative exercises cited in the scheme include not only manipulation and display but also practice in the communication skills of speaking and writing in the working situation (e.g. report-writing, and the comprehension and transmission of instructions). There is a direct link here with the French thesis that all school pupils should, especially in the final years of compulsory schooling, be introduced to some technological matter which will combine a technical bias with genuine educational value [1].

(vii) *Information and first-hand experience of the work situation*

A frequent objective of continued education programmes in many member countries is that pupils, before they actually enter paid employment, should be given the fullest and most realistic insight into what it is really like to be young workers.

This may be given an explicit place and time-allocation in the curriculum (e. g. "Vocational information and guidance" in the Austrian Polytechnic Year, "Practical vocational guidance" in Sweden), or be expected to form an implicit element in other subjects or areas of study which are clearly preparatory to entry into working life (e.g. "Preparation for work" in North-Rhine Westphalia, *Betriebspraktikum* in Hesse, "Investigations" in France).

The content of these studies has two principle aspects : information and first-hand experience. The syllabus for "Occupational information" in the programme of the Austrian Polytechnic Year broadly typifies the scope of the first element. Its aim is to "familiarise the pupil... with the entrance requirements, character, advantages and disadvantages of the most important groups of occupations so as to facilitate the choice of a career and the psychological adjustment to the future occupation". Within this framework, conditions of work, the variety of work processes, wages and promotion prospects, industrial safety, and forms of social co-operation are among the topics singled out for special attention. In Austria, as in other countries, the specialist vocational guidance and placing services of the Ministry of Labour or its equivalent are seen as major sources of such information, and partners in the whole operation of keeping the schools fully abreast of the changing labour market [2]. In most countries, there is evidence of a rapid diversification in the media used for conveying this information. Not only is more careers literature, often attractively illustrated with photographs and cartoons, being produced for the less able pupil, but full advantage is being taken of the power of radio, films and television to bring into every school, however small or remote, a fuller picture of the working world outside the school's immediate locality. Although this wider knowledge may often foster unrealistic expectations, it can also be an essential means of enabling pupils to measure their own interests, abilities and attainments against the requirements of the working world, and therefore to find their own initial place in the fields of employment which are, in practice, open to them.

---

1. For further details, see the report of the Seminar on "The Place of Technical Education in Secondary Education", Sèvres 1965. EGT (65), Stage XX-3. Council of Europe, Strasbourg, February 1966

2. For further information see Reuchlin, *Pupil Guidance : Facts and Problems*, Education in Europe Series, No. II-3, Strasbourg 1965.