BÖLGEDE UMUMİ
ÖĞRETİME AİT
MALZEME

THE "EMPIRE" PORTFOLIO. MADE IN ENGLAND. W. STRAKER, LTD., LONDON AND BRANCHES.

TDV İSAM
Kütüphanesi Arşivi
No 059-126/1

ARCHITECTURE TO-DAY

The 338th article in the Financial Times Series

BUILDINGS FOR EDUCATION—V

By A. Trystan Edwards, F.R.I.B.A.

WITH the exception of the L.C.C. no local authority in this country is carrying out a more formidable programme of school building than is the Middlesex County Council. Such a statement does not appear surprising when it is borne in mind that the population of the county is 2¼m. and the number of those who are still of school age is 282,530.

The estimated capital expenditure in respect of this programme is £86½m. or £90m. approximately, which total includes the voluntary schools, Church of England and Roman Catholic. Since the commencement of building in the early part of 1947, 150 major school projects have been put in hand, of which 70 are in process of building and 80 have been completed. The value of the work already carried out since the war is about £15m.

HIGHLY ORGANISED

NEEDLESS to say, the architects' department must be highly organised if it is to cope successfully with such an enormous volume of building. The group system has here been adopted, whereby there are four senior group architects assisting the County Architect, together with a number of architects in private practice. The department is subdivided between major architectural works, minor works and building maintenance, and also contains the following sections—namely, quantity surveying, heating and electrical engineering and structural engineering.

In order to make the most interesting selection from the wide range of school architecture represented in the programme now being sponsored by the Middlesex Education Authority, it has been decided in the present article to illustrate three different types of building—a technical college, a secondary modern school and a primary school. It may be a convenient procedure if in the first instance there is a brief description of these projects and, secondly, some architectural comment of a general nature.

The Willesden Technical College is at the junction of Dudden Hill-

frame was designed to standardise the size of members as far as possible to assist speed of erection and to achieve economy. The first floor slab was designed to take a superimposed load of 200 lbs per square foot to enable heavy machinery to be installed at a later date if this should be required. The heat engines laboratory has a suspended floor insulated from the machine bases which stand upon a main ground slab, the space between acting as a service duct to allow maximum flexibility of layout.

Externally the building is faced with Buckinghamshire multi-coloured bricks, while concrete slabs are faced with Criggion granite and Derbyshire spar.

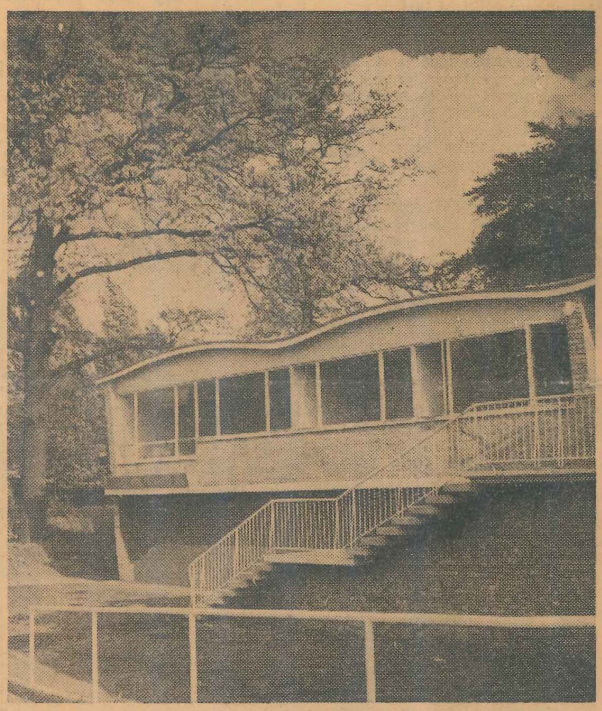
Internally the walls are for the most part fair-faced lime bricks or are plastered.

£200,000 EXTENSION

THIS extension, which has been built at a cost of £200,000, was designed under the supervision of Mr. C. G. Stillman, F.R.I.B.A., County Architect, and of Mr. D. R. Duncan, O.B.E., A.R.I.B.A., Area Architect, with Mr. J. W. Paterson, A.R.I.B.A., senior architect. Mr. W. V. Zinn was the structural consultant and Messrs. G. R. Buckle and Partners were the electrical consultants.

The same architects were responsible for the design of the Copland Secondary Modern School, Harrow-road, Wembley, here shown in a perspective sketch. This building was commenced in October, 1949, and is due to be completed by the end of this year. The site, which is a restricted one, is bounded on the north by Harrow-road and on the west by Cecil-avenue. Originally it was the site of the old Wembley Hill School which was demolished by enemy action during the war.

This is a five-form school for 800 boys and girls and includes, in addition to normal teaching rooms, chemistry, physics and biology laboratories and metal, wood and science workshops, together with general purpose classrooms, drawing office, needlecraft and domestic science rooms. The large general purpose hall, with gallery and stage, has workshop and changing rooms underneath. In addition there is a students' dining-room



Cavendish School, Chiswick. *Architects: C. G. Stillman, F.R.I.B.A., with C. E. Hartland, A.R.I.B.A., and L. T. Channing, A.R.I.B.A.*

The site of the Cavendish Primary School, Edensor-road, Chiswick, is two acres in extent and is well planted with mature trees, but as it is liable to flooding the buildings are lifted some feet above the ground on piles.

The school is a one-form entry junior and infant school for 280 children. This is one of 20 Primary schools completed for the 1950 education programme. A large degree of standardisation was introduced in design and construction in this group of schools to save time in the drawing office. The Cavendish School is composed of a standard classroom block comprising seven classrooms, cloakrooms, lavatories and administration block, the boiler-house, which is above flood level. A later development of this standardised plan is now under construction, whereby the accommodation in the administration block is to be housed under the classroom block to give an even more compact plan for restricted sites, and to be within the Ministry's later cost figure of £140 per place.

This school was designed by Mr. C. G. Stillman, F.R.I.B.A., County Architect, with the collaboration of Mr. C. E. Hartland, A.R.I.B.A. and of Mr. L. T. Channing, A.R.I.B.A., assistant architects, and the general contractors were Messrs. Prestige and Co., Ltd.

Technical School, Willesden. *Architects: C. G. Stillman, F.R.I.B.A., with D. R. Duncan, O.B.E., A.R.I.B.A., and J. W. Paterson, A.R.I.B.A.*

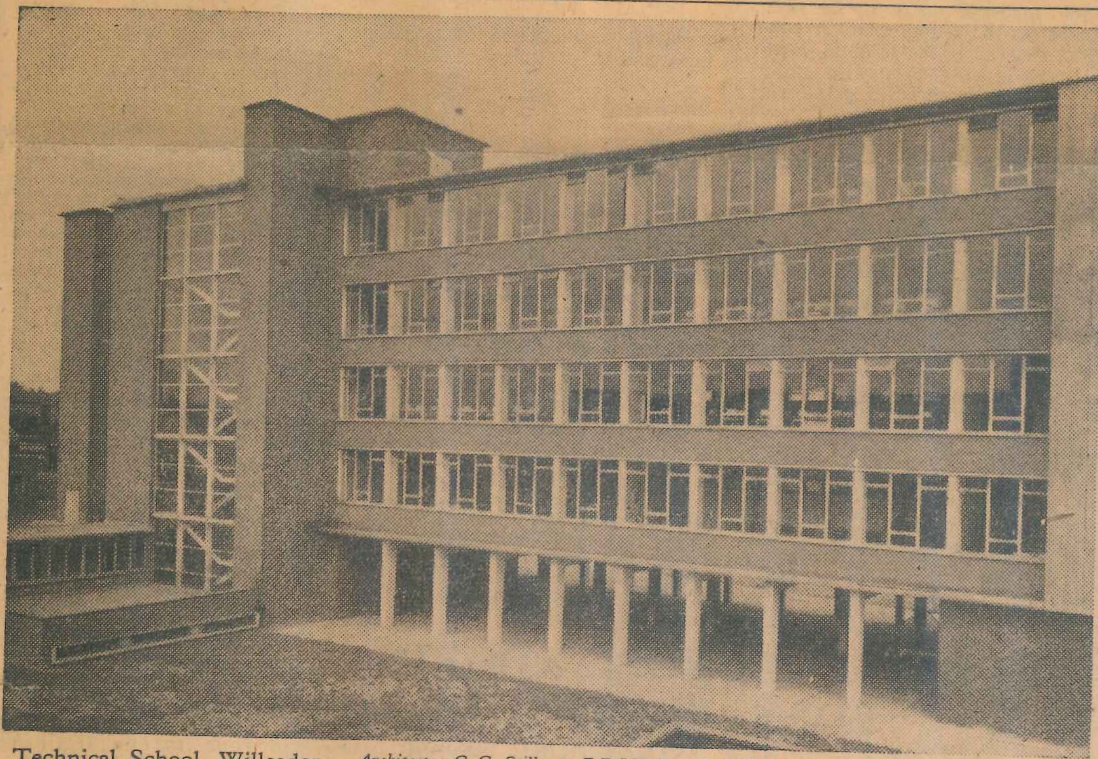
These schemes offer a significant contrast in architectural form, for they represent the three main divisions in school-building at the present time. The first example is the multi-storeyed type which usually signifies that the site on which the school is erected is a restricted one. In quite a number of the new colleges for further education the classroom blocks are of five or six floors because they are situated in urban localities. The Willesden Technical College has a reposeful exterior showing types of orderly fenestration which reflect logical arrangements in interior planning.

LARGE-SCALE GROUPING

THE Copland Secondary Modern School is perhaps the most interesting of the compositions here shown, inasmuch as to a greater extent than the others it has a civic character; that is to say, it represents large-scale grouping of buildings in continuous formation. The quadrangular pattern here adopted provides opportunities for attractive elevational treatments and the harmonious ensemble of building blocks which, though of different heights, are organically related to one another.

It is noteworthy that in this example, as in Hatfield Technical College, illustrated in THE FINANCIAL TIMES a few weeks ago, there is a pleasing reminiscence of

... general purpose classrooms, draw- duced in design and construction



Technical School, Willesden. *Architects: C. G. Stillman, F.R.I.B.A., with D. R. Duncan, O.B.E., A.R.I.B.A., and J. W. Paterson, A.R.I.B.A.*

instance there is a brief description of these projects and, secondly, some architectural comment of a general nature.

The Willesden Technical College is at the junction of Dudden Hill-lane and Denzil-road. The former thoroughfare is scheduled for widening in the future and the extension of the building was planned in such a way as to retain as much free ground space as possible on the limited site.

The accommodation, which is provided on five floors, includes chemistry, physics, metrology, microscopy and heat engines laboratories, classrooms and drawing offices. In addition there are a lecture hall, students' dining-room, staff room and governors' room. Two passenger lifts and service lifts are provided in this main block.

The building is a reinforced concrete framed structure with brick and concrete slab panel filling. The ing office, needlecraft and domestic science rooms. The large general purpose hall, with gallery and stage, has workshop and changing rooms underneath. In addition there is a students' dining-room with fully equipped kitchen, two gymnasia with changing rooms, cloakrooms, lavatories, staffrooms and a caretaker's flat.

The main school building is a steel framed structure, and the gymnasia block reinforced concrete frame. Floors and roofs are in hollow tile and concrete, except for the assembly hall which has a flat roof in aluminium. The boiler-room houses automatically stoked boilers, supplying heat for radiators and hot water service.

Externally the assembly hall is faced with Buckinghamshire brown facing bricks and elsewhere yellow stock bricks. Internally, surfaces have been generally plastered or are in fair-faced flint lime bricks.

in this group of schools to save time in the drawing office. The Cavendish School is composed of a standard classroom block comprising seven classrooms, cloakrooms, lavatories and administration block, raised on a light reinforced concrete frame, under which a covered play-space is provided.

SUPERSTRUCTURE

THE superstructure has a frame of light steel tubular columns supporting welded steel trusses built of light angles. The roofs are of reinforced wood wool with a half-inch screed and ply felt finish. External and internal walls are cavity brick. The utmost economy has been exercised both in the planning and construction to bring these schools within the Ministry's figure of £170 per place.

Oil-fuel heating and low-pressure hot-water system were adopted to minimise the handling of fuel from ground level up to

Architect, with the collaboration of Mr. C. E. Hartland, A.R.I.B.A. and of Mr. L. T. Channing, A.R.I.B.A., assistant architects, and the general contractors were Messrs. Prestige and Co., Ltd.

These schemes offer a significant contrast in architectural form, for they represent the three main divisions in school-building at the present time. The first example is the multi-storeyed type which usually signifies that the site on which the school is erected is a restricted one. In quite a number of the new colleges for further education the classroom blocks are of five or six floors because they are situated in urban localities. The Willesden Technical College has a reposeful exterior showing types of orderly fenestration which reflect logical arrangements in interior planning.

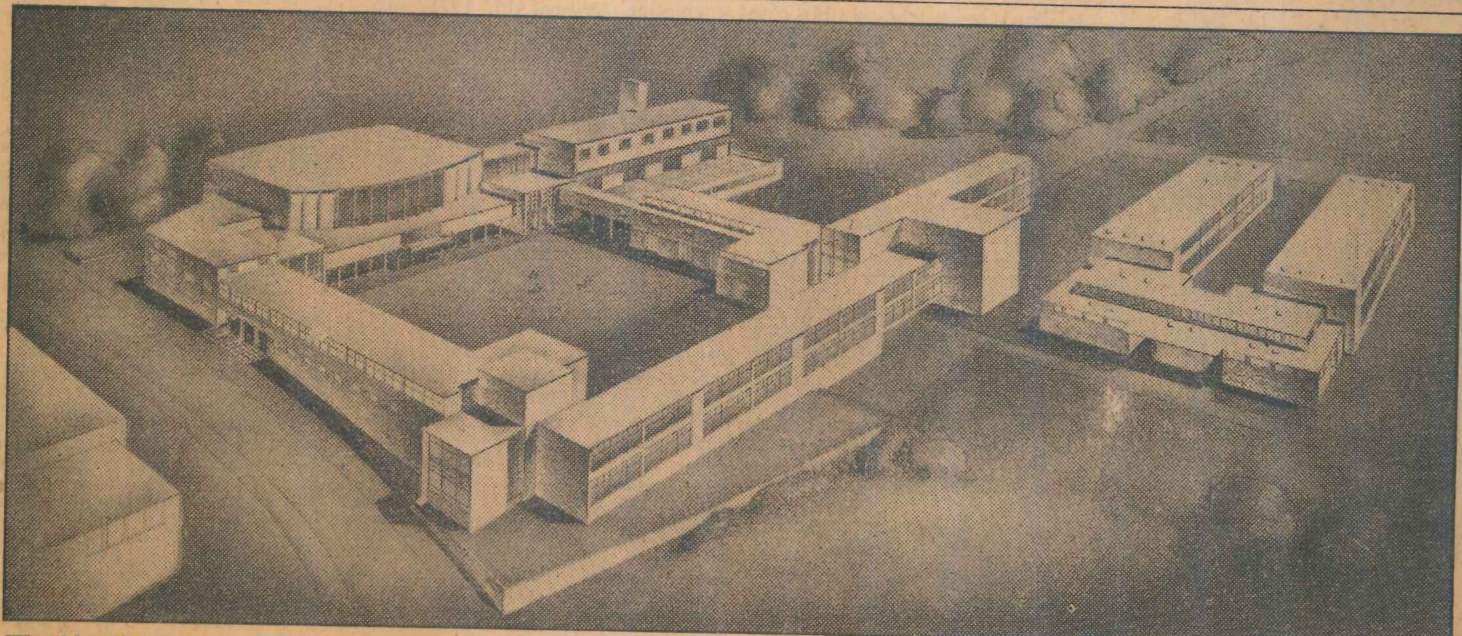
LARGE-SCALE GROUPING

THE Copland Secondary Modern School is perhaps the most interesting of the compositions here shown, inasmuch as to a greater extent than the others it has a civic character; that is to say, it represents large-scale grouping of buildings in continuous formation. The quadrangular pattern here adopted provides opportunities for attractive elevational treatments and the harmonious ensemble of building blocks which, though of different heights, are organically related to one another.

It is noteworthy that in this example, as in Hatfield Technical College, illustrated in THE FINANCIAL TIMES a few weeks ago, there is a pleasing reminiscence of the colleges of Oxford and Cambridge Universities, where the hall is given special prominence while conjoined with other elements of accommodation. In the case of the Copland Secondary School, the hall, which is made available for a certain number of public functions, has an entrance from the main road.

The architectural staff of the Middlesex County Council are to be congratulated upon the high standard attained in the design of the numerous schools now being built under the auspices of this authority.

Advertisers are not necessarily connected with the buildings under review.



Wembley Copland Secondary School. *Architects: C. G. Stillman, F.R.I.B.A., with D. R. Duncan, O.B.E., A.R.I.B.A., and J. W. Paterson, A.R.I.B.A.*

TDV İSAM
Kütüphanesi Arşivi
No 059-126/2

UNIVERSITY OF LONDON

INSTITUTE OF EDUCATION

ASSOCIATESHIP OF THE INSTITUTE OF EDUCATION

The Council may award the title of "Associate of the Institute of Education" to experienced teachers and educationalists who have been students of the Institute for at least one session and are qualified to receive the award.

In order to be eligible for the award a student must (1) have had at least five years' experience in approved educational work; (2) be qualified by his experience to undertake advanced studies in education; (3) satisfy the Institute that, in the special circumstances of the case, a course of study for the Teacher's Diploma or for a Higher Degree would be inappropriate.

Every candidate for the title will decide after consultation with his teachers in the Institute as to the special line of study or investigation he will pursue.

Formal application must be made to the Director not less than six months before the conclusion of the course giving evidence of compliance with the foregoing conditions. The application must be accompanied by a fee of £3 3s.

At or towards the conclusion of his course the candidate shall send to the Director a Report in acceptable literary form of his studies and investigations as a student of the Institute.

The Council will decide, after receiving the advice of not less than two assessors appointed for the purpose, whether the candidate is entitled to the award, and its decision shall be final.

(28389) 1000 5/50 M. & S., Ltd. [1451]

The University session begins in October, and applications for admission to the Institute with a view to qualifying for the Associateship should be made to the Director as long as possible before the proposed entry. Applications should give full details of the education, training, and experience of the applicant, and should be accompanied by at least two recommendations from persons who have adequate knowledge of the applicant's abilities and achievements in educational work. Applicants should state in some detail the nature of the studies or investigations which they propose to undertake. It should be noted that the Institute prescribes no course of study for the award, and that the ability of the applicant to propose a good and appropriate plan of work will be regarded as important evidence of his suitability for admission.

The fee payable to the Institute in respect of the year of study is £62 10s.

G. B. JEFFERY, M.A., D.Sc., F.R.S.,
Director of the Institute of Education.

June 1950

TDV İSAM
Kütüphanesi Arşivi
No 059-126/3

UNIVERSITY OF LONDON
INSTITUTE OF EDUCATION

DIPLOMA IN THE TEACHING OF ENGLISH AS A FOREIGN LANGUAGE

Director: G. B. JEFFERY, M.A., D.SC., F.R.S.

Head of Department: PROFESSOR BRUCE PATTISON, M.A., PH.D.

The Institute provides a course of training in the Teaching of English as a Foreign Language, and awards a Diploma on the result of the examination at the end of the course.

The course is intended for graduates of British and other Universities who have received approved training as teachers and wish to study the principles and methods of teaching English language and literature to foreign pupils. (Non-graduate students with good professional qualifications may also be admitted at the discretion of the Head of the Department.) The course is not intended to provide primary training as a teacher. It extends over one academic session and includes:

(1) Training in phonetics and in spoken English.

(2) Lectures and seminars on linguistics, with special reference to English, and on the English language.

(3) Lectures and seminars on methods of teaching English as a foreign language.

(4) Lectures and seminars on the teaching of English literature.

(5) Lectures and seminars on British life and thought.

(6) Practical teaching.

(7) Visits to British educational and other institutions.

(6) and (7) may involve some residence away from London for short periods.

The fee for the complete course is £62 10s. 0d. Applications for admission should be made in the session preceding that in which the student wishes to enrol to the Secretary, University of London Institute of Education, Malet Street, London, W.C.1, as soon as possible after 1 October.

Examination

Before admission to the examination the student must have obtained a satisfactory standard in spoken English and have pursued the prescribed course of study to the satisfaction of his teachers. The prescribed course will extend over one academic year and will include lectures and a programme of visits.

The written examination will include:

(1) The English language (one paper of three hours).

(2) Methods of teaching the English language to pupils whose native language is not English (one paper of three hours).

(3) Methods of teaching English literature (one paper of three hours).

(4) British life and thought (one paper of three hours).

(5) An essay on an educational topic approved by the examiners.

There will be an oral test, including a test in phonetics.

The student's performance in practical teaching will form an integral part of the examination.

The written examination will be held in June or July. Candidates must apply for entry forms and certificates of the course of study, which must be returned to the Secretary of the Institute of Education not later than 1 June, accompanied by a fee of three guineas.

All cheques should be made payable to the Institute of Education and crossed 'Westminster Bank Limited, Bloomsbury Branch, A/C Payee only.'

A certificate of the Institute to be called 'The Diploma of the University of London Institute of Education in the Teaching of English as a Foreign Language' will be delivered to each candidate who has satisfied the Examiners and who possesses the necessary qualifications as stated above.

June, 1952.

CP/8346/7488/6-52

Mr. Koefoed;

Denmark House,

Anglo Danish Students' Bureau,

71 Piccadilly,

W. 1.

Telephone: Regent 1762.

11. a.m. Monday. 6th July

TDV İSAM
Kütüphanesi Arşivi
No 059-126/4

SURVEY

OF

DANISH ELEMENTARY, SECONDARY, AND FURTHER (NON- VOCATIONAL) EDUCATION

*

MINISTRY OF EDUCATION

J. H. SCHULTZ A/S
UNIVERSITETS-BOGTRYKKERI
KØBENHAVN
1951

Un.00-3-(B)

TDV İSAM
Kütüphanesi Arşivi
No 059-126/4

SURVEY

OF

DANISH ELEMENTARY, SECONDARY, AND FURTHER (NON- VOCATIONAL) EDUCATION

*

MINISTRY OF EDUCATION

J. H. SCHULTZ A/S
UNIVERSITETS-BOGTRYKKERI
KØBENHAVN
1951

CONTENTS

TDV İSAM
Kütüphanesi Arşivi
No

A. Public Elementary Education.

I. ADMINISTRATION

The Danish public elementary school is a municipal institution subsidized by the Government.

The supreme school authority in the municipality is the municipal council, which settles all questions not under the control of other authorities and which, within the limits fixed by the Elementary Education Act (18 May 1937), has upon the whole a decisive influence on the planning of the Elementary Education system in the municipality.

The supervision and guidance of the school activities is in each municipality vested either in the education committee of the municipality alone or in the education committee in conjunction with the board of governors of the separate school. Usually the municipal council can decide which of the two kinds of supervision is to be adopted. Still the parents of the pupils in each school district can, if a certain number of them wish so, demand a voting to be held on the question whether a board of governors is to be set up or not, and if there is a majority in favour of it, a board of governors has to be set up.

The members of the education committee are appointed by the municipal council, which must take care that in each school district the parents are represented in the committee.

The number of members must be twice the number of schools plus one, yet not less than five and not more than fifteen.

The municipal council decides, according to the size of the school, whether the board of governors is to have three or five members. One of the members is appointed by the education committee, the others are chosen by the parents of the pupils.

The education committee and the board of governors supervise the schools, the instruction given, and the teachers' discharge of their official duties, they propose school plan and curriculum, and have the final decision of various questions concerning the daily life of the school.

They have a right to state their opinion on all educational matters before they can be decided by the higher authority.

The point of view underlying the distribution of tasks between the education committee and the board of governors is that the former is to attend to

questions concerning the whole of the municipal school system, the latter only to questions of interest to the individual school.

The rector or, with the sanction of the bishop, another clergyman in the municipality has the right of attending lessons in religious instruction in the schools of the parish, but has no duties of supervision.

The principal of the individual school is responsible for its administration and daily conduct.

In rural schools the principal is the head teacher, who, however, has generally no duty of supervising the instruction given by the other teachers.

The headmaster (called the school inspector) of a municipal school manages the school and supervises all its activities, also the instruction given by the other teachers.

The whole staff of the school constitute the Teachers' Council, which is entitled to be consulted on important questions regarding the school.

The teachers of all the schools of the town constitute a Joint Council, which has corresponding powers as to general educational matters in the municipality.

The chairman of the teachers' council and the headmaster of the school attend, though without right of voting, the meetings of the board of governors, unless appointment of teachers is being discussed. The chairman of the joint council attends the meetings of the education committee, unless appointment of teachers is being discussed.

In towns the headmaster of one of the schools often acts as secretary to the Education Committee and assists in the administration of the schools (he is called Municipal School Inspector).

In large municipalities there is often a Director of Education, who has the administration of the whole educational system. He has no educational, only administrative duties. Like the chairman of the joint council the director of education attends, though without right of voting, the meetings of the education committee.

Urban Municipalities are with regard to education under the immediate control of the Ministry of Education, and all educational questions which are to be decided by the Ministry are submitted by the municipal council directly to the Ministry.

Rural Parishes are subject to the supervision of the County School Directorate, consisting of the County Prefect (the chief administrative officer of the county), and four of the elected members of the County Council.

The School Directorate is assisted by the County Educational Adviser. His appointment is conditioned by at least ten years' service as a teacher in a public elementary school.

The School Directorate has the chief control of the schools of the rural parishes and decides on a number of educational matters. It is the connecting link between the parish councils and the Ministry in all educational questions, and it has to state its opinion on all such matters before they are submitted to the Ministry.

The Ministry of Education is the central authority for education and issues all regulations binding on the local authorities, in conformity with the powers conferred by the Acts of Education. Decisions of the local authorities can as a rule be appealed to the Ministry. The Ministry is assisted by various state educational advisers.

The Municipality of Copenhagen has extensive autonomy as to its school system. The School Directorate of Copenhagen, appointed by the City Council, has in its administration of the schools in the main the rights normally possessed by the Ministry. The school directorate is assisted by a director of education and three vice-directors.

Of fundamental importance in the educational system of a municipality is the school plan, which fixes the number of school districts and their areas, the organisation of the schools, the question whether they are to comprise an examination department or not, the number of teachers, their qualification and remuneration, and the date when the school year is to begin.

The school plan is drawn up by the Municipal Council according to reports of the Education Committee and — in the case of the rural parishes through the County School Directorate — submitted to the Ministry, without whose approval no school plan is valid. The school plan covers the whole of the municipality.

For each school is drawn up a plan of instruction, containing detailed rules concerning instruction given and subjects taught in the various schools, what aim is to be attained, and holiday plan.

The plans of instruction are to be approved, in the case of the rural parishes by the County School Directorate, in that of the municipalities by the Ministry.

II. ORGANISATION OF PUBLIC ELEMENTARY EDUCATION

Public elementary education in Denmark was established by statutes issued as early as 1814, according to which elementary schools were to be set up in all boroughs, and a compulsory school age from seven to fourteen was constituted.

These statutes, which give evidence of a foresight unusual for their time, and of a warm interest in the education also of the lower classes, have been the foundation of Danish school legislation till the passing, on 18 May 1937, of the Elementary Education Act now in force.

This Act states the aim of the public elementary education as follows: "To encourage and develop the natural gifts of the children, to strengthen their characters, and to impart to them useful knowledge." The Ministry has later on, 21 May 1941, through a circular given more detailed directions concerning the purpose of the education: "It ought to strengthen the children's feeling for ethical and Christian values, inspire them with respect for human life and for nature, teach them to love their homes, their people, and their country, to consider the opinions of other people, to appreciate community between the peoples and fellowship with the other Scandinavian nations. Thus the school should contribute to giving the children ideals, help them to set themselves aims in life, add

to their respect for sincerity in speech and behaviour, and strengthen their sense of duty. By means of a healthy discipline they should learn good behaviour and sense of order."

It is stated in the first clause of the Act that the religious instruction provided must be in conformity with the Lutheran doctrines of the Established Church. Religious instruction is a compulsory subject in all public elementary schools, but a child may be exempted from attending if the parents wish so. In the same way a teacher who objects to giving religious instruction may be exempted.

Municipal schools are as a rule co-education schools.

The compulsory school age is from seven to fourteen years of age, compulsory school attendance setting in at the beginning of a school year for the children who at that time have completed their seventh year, and ceasing at the end of the school year in which the children have completed their fourteenth year.

Infant Schools are not part of the public elementary school or of the municipal school system. They are run either by the municipality as separate institutions or as private enterprises, subsidized by the State.

While in other countries the compulsory school age has been extended to the fifteenth or sixteenth year, this has never met with general approval in Denmark. It has been urged, especially by the farming interest, that it is better for a child of fourteen to go into practical work, and that the further education it might need can best be supplied at a later age in voluntary continuation schools or people's high schools.

a. Municipal Schools.

1) Municipal Schools without Leaving Examination Departments.

A municipal non-examination school consist of a four-year Grundskole (primary school) and a three-year Hovedskole (post primary school).

The total of hours of instruction provided during the seven school years must be 6480, and of these the postprimary classes should be given at least 1200 hours a year. Thus a class in the primary school, if the minimum requirements of the Act are followed, need not have more than 720 hours of instruction a year.

The school week is of six days, and a special week-end arrangement is not general.

The school hours must not exceed in the two first years four hours, in the two next five, and in the senior classes six hours a day.

The school year is reckoned to consist of forty weeks, but, provided the necessary number of hours is reached, this rule may be deviated from.

The average number of pupils per class in an urban school must not exceed 33, in a rural school 35, any absolute maximum of pupils in the individual class not being prescribed, beyond the rule that the top class must not contain more than 30 pupils.

The curriculum comprises the common elementary school subjects: 1) Danish, oral and written, 2) Writing, 3) Arithmetic, 4) Scripture, 5) History, 6) Geography, 7) Natural History, 8) Gymnastics and Games, 9) Singing, 10) Drawing, 11) Needlework (for girls).

All these subjects must gradually be given a place in the curriculum of the primary school, but the whole series of subjects need not be complete till the last year in the primary school.

In the post-primary school (Hovedskolen) the curriculum is extended with 12) Physics, 13) Woodwork for the boys, and 14) Housewifery for the girls.

Instruction in one foreign language may be given in the postprimary school.

2) Municipal Schools with Leaving Examination Department.

As most towns wish to add an examination department to the elementary school, they adopt the scheme of a bi-furcated elementary school, which, after the four primary classes, is divided into an Examination Middle School and a Non- Examination Middle School, both covering four years, from 11 to 15, so that they exceed the compulsory school age by one year.

There is a provision in the Act that municipalities which offer to pupils of a bookish turn of mind instruction in an examination school, must also provide for children who are not interested in or have no aptitude for such work instruction in a non-examination school, also covering the years 11—15, in which the teaching is adapted to the future practical work of the pupils.

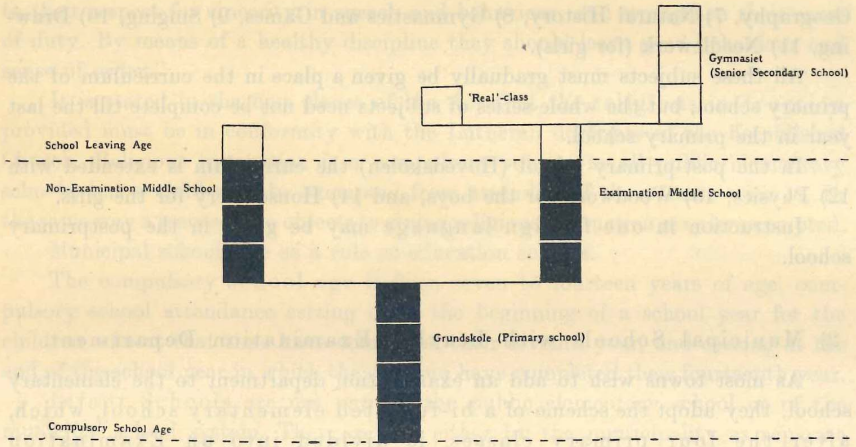
The examination middle school leads up to the 'Real'-class and to the Senior Secondary School (Gymnasiet) and will be dealt with in the next section of this survey.

The Non-Examination Middle School is intended to prepare for practical work and to form the basis of the apprentice schools, technical and commercial, which are compulsory on apprentices in handicrafts and commerce, and of the voluntary schools, adolescent and evening schools, open to young people, and which will also be treated in the following section.

The non-examination school, with the content it was possible to give it, had been expected to attract pupils and be appreciated by employers, who, it was imagined, would be as ready to apprentice pupils from the non-examination school as holders of middle school or 'Real'-examination certificates. This, however, has not been the case. The first inquiry in practically all trades is about examination marks, so the non-examination middle school is essentially attended by children who on leaving school join the ranks of unskilled workers, the boys becoming messengers, factory boys, and labourers, the girls factory girls and domestic servants.

So far the non-examination middle school may be said to have been a failure. Still, the number of pupils is increasing, more and more pupils remaining in school after the compulsory school age.

Graphically the municipal school with examination department may be set out as follows:



A number of municipalities, among which Copenhagen, think that pupils who have spent only four years in the primary school (Grundskolen) are not possessed of sufficient maturity for admission to the examination middle school, and have therefore added a fifth year to the primary school, the result being that the middle school, with its two departments, is continued to the 16th instead of the 15th year, that the 'Real' examination is passed at 17, and the Studentereksamen (Matriculation Examination, Higher School Certificate Examination) at 19 years of age. Consequently the two last years in the middle school are beyond the compulsory school age.

It is a weakness of the system that the school leaving age was not raised at the same time as it was made compulsory on the municipalities wishing to introduce the examination middle school to set up also a non-examination department extending beyond the compulsory school age, and the fact that many pupils leave school when they have completed that age may give rise to considerable difficulties of organisation.

It is therefore provided in the Act that the fourth non-examination middle school class need not be established if attended by less than ten pupils, and that the pupil who has been admitted to the class must not leave it in the middle of the school year without the consent of the Education Committee. Still, that does not solve the whole problem.

The Non-Examination Middle School, as indicated by the name, concludes without any examination, but the pupil who has gone through the whole school may be given a Certificate of Attendance, which, besides a general statement regarding the pupil's attainments, industry, and conduct, may contain estimates of proficiency in the following subjects: Danish, Arithmetic, Writing, and Neatness.

It is not impossible for a pupil to pass from the non-examination to the examination middle school or vice versa, but the rule is for a pupil that has come into the non-examination department to remain there throughout the school. If

he proves later on to possess sufficient ability and wishes to get a certificate, there is in most towns an opening in the municipal examination courses, which in two years can lead him to a leaving examination, Almindelig Forberedelseseksamen (literally translated: General Preliminary Examination, corresponding approximately to the Lower School Certificate Examination), giving equal rights with the ‚Real' examination, and after that, in two more years, to the Studentereksamen (Matriculation Examination). However, such instruction through a course and not in a school, must always be considered a makeshift.

Most towns are divided into school districts, each catering for the pupils concerned. Sometimes, however, the pupils are distributed more freely among the schools.

According to the Act the school year begins on 1 April, but the majority of towns have been allowed by the Ministry to delay the beginning of the school year to 1 August, as examination schools prefer the school year to begin after the summer vacation.

b. The Rural School.

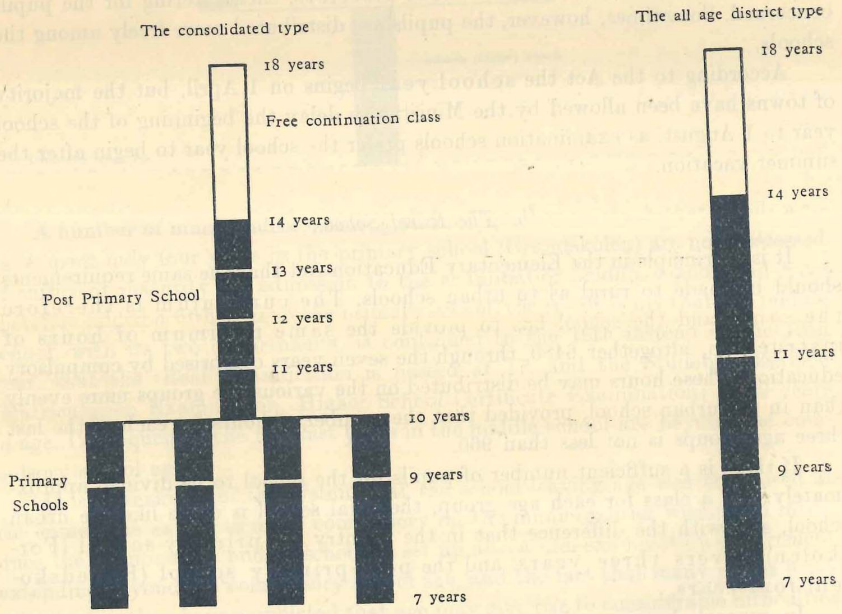
It is a principle in the Elementary Education Act that the same requirements should be made to rural as to urban schools. The curriculum is therefore the same, and the school has to provide the same minimum of hours of instruction, altogether 6480, through the seven years comprised by compulsory education. These hours may be distributed on the various age groups more evenly than in the urban school, provided that the number of hours for each of the last three age groups is not less than 960.

If there is a sufficient number of pupils for the school to be divided approximately into a class for each age group, the rural school is quite like the urban school, still with the difference that in the country the primary school (Forskolen) covers three years, and the post-primary school (Hovedskolen) four years.

In general, however, the rural school has not a class for each age group, several of which are taught together, and it is evident that as a rule such a school cannot compare with a school with fully developed classes. Of the 3283 rural schools in Denmark (according to the latest statistics now available, of 1 January 1948) 104 had one class, 1189 two classes, 652 three, 937 four, 175 five, 140 six, and 86 seven classes. It must, however, be borne in mind that the school system is still partially regulated in accordance with conditions before the passing of the Elementary Education Act in 1937. When the Act has been fully carried into effect — by 1 April 1958, as stated by Act of 27 May 1950 — schools with only one class will to a great extent have ceased to exist, schools with two classes will have got three, those with four classes either three, if the number of pupils is small, or five, and the number of schools with six or seven classes will upon the whole be increasing, as the Elementary Education Act requires added hours of instruction, which will cause further class division and consequent increase of staff.

Regulations regarding length of school day are the same for rural as for urban schools, and so is the curriculum.

Rural parishes are divided into school districts, and it must be seen that as a rule no pupil has a longer journey to school than 3.5 km., in the case of juniors 2.5 km. Therefore junior pupils are often sent to self-contained preparatory schools, covering three years, where they are taught by a preparatory school mistress. Pupils from several preparatory schools are, after the three years, transferred to the same main school. Such Central or consolidated Schools are supplied with gymnasium and technical outfit not necessary in the preparatory schools. Graphically the modern rural school may be set out as follows:



In the country the school year normally begins on 1 April, it being desirable that school attendance should conclude in spring, which is the busiest time in farming.

No official instructions have been given with regard to syllabus of instruction or methods of teaching. The Ministry has declared, in the above mentioned circular of 21 May 1941, that no attempt will be made to lead the instruction along definite paths, so long as the prescribed object is attained. Only general statements have therefore been made as to what should have been achieved at the end of school attendance, whereas the Ministry has not wished to give any directions for the detailed planning of elementary education within the limits set by the Act. Consequently teachers have full liberty with regard to teaching method.

This holds good of the rural school as well as of the non-examination branch of the urban school. For the examination school on the other hand detailed directions and regulations have been issued.

In 1942, however, the ministry issued a handbook of suggestions for these schools, prepared by a committee consisting of representatives of D.L.F. (The National Union of Teachers), the training colleges, and the state educational adviser. This handbook is being used by education committees and teachers when preparing syllabus and arranging plans of instruction.

To the rural school may be added a continuation class for pupils from 14 to 18 years of age. It must be established if the parents of fifteen pupils between 15 and 18 years of age demand it and the Education Committee recommends it. It is always voluntary and comprises 360 hours of instruction, the object of which should principally be to qualify the pupils for practical life. In parishes where such classes have been set up, the instruction is often given during winter afternoons.

c. Facilities for Higher Education offered to Rural School Pupils.

If a village school is large enough for bi-furcation into an examination and a non-examination middle school, such an arrangement is possible, and the rural school can be organized like an urban school.

But generally the number of pupils is too small for that, and at the end of the fourth or the fifth school year the pupils must therefore seek admission to an examination school in the nearest town. Many parents, however, strongly object to having to send children of eleven or twelve years to school in a strange town, even if it means only a daily journey by railway or bus. They prefer to postpone the studies in the examination school and keep their children in the village school for some more years.

An earlier type of 'Real' Examination, the General Preliminary Examination, has therefore been allowed to remain beside the regular 'Real' examination. The difference between the two types is that, while the latter examination tests only the last year's work, on the ground that the pupils have got through the whole of the curriculum during the four years in the middle school and one year in the 'Real' class, the General Preliminary Examination comprises the curriculum of the whole school. Consequently pupils are allowed to enter for this examination after the three, possibly only two years' attendance at a four-year 'Real' school preparing for the General Examination, and they can thus remain in the village school till the thirteenth or fourteenth year.

While the continuation class mentioned above is not very popular—people prefer the common evening school or youth school for unskilled adolescents, which give the education freer scope — it has aroused greater interest that to the rural school may be added a Course preparing for the General Preliminary Examination, and generally aiming at finishing the preparation in two years. This can only be attained if the pupil has been taught English, German, and mathematics in the elementary school, subjects which do not ordinarily belong to the curriculum of the elementary school. According to the Act only one foreign language may be included in the curriculum of the rural school, and only on condition of instruction being provided to the class annually. If the number of hours

keeps at the minimum of 960, foreign languages must be excluded. The reason is that the elementary school should principally concentrate on the main subjects, and not include subjects from the examination school, till it has arrived at such a degree of development that the main subjects may be supposed to have been first attended to satisfactorily.

It is, however, difficult for a pupil from an elementary school, who has been taught only one foreign language and no mathematics, to prepare for the Preliminary Examination in two years, so the Ministry has sanctioned that the second foreign language and mathematics may be included in the curriculum of the rural school, being taught in lessons exceeding the 1200 hours above-mentioned, and only to the pupils who aspire to admission to the preliminary examination course.

Still, there are not many rural parishes anxious to add an examination school or an examination course to their school system, and the usual thing is therefore for those children that want a certificate to be admitted to an examination school in the nearest town. With the short distances and good means of communication that exist in Denmark this does not cause great difficulties either. Besides, some of the private examination schools are situated in rural parishes.

d. Education of Mentally and Physically Defective Children.

It is provided in the Act that, wherever circumstances allow, special education shall be given to children incapable of receiving ordinary school education, children who are deficient in intelligence, deaf, myopic, or otherwise handicapped. More definitely: A local authority is bound to establish a special class if there are at least twenty thus handicapped children in the school area. If there are less than twenty, individual education must be given in the normal class. Special education must also be provided for children with speech defects.

Every county and every borough employs a special education adviser, who assists the authorities in arranging the education of handicapped children, holding intelligence tests, procuring special education material, etc., and a permanent committee for special education is appointed by the ministry for the purpose of arranging courses for special education teachers and looking after the publication of suitable text books.

III. SCHOOL BUILDINGS AND EQUIPMENT

School buildings must be provided by the local authority, which also pays expenses of upkeep, lighting, and cleaning. The local authority is also required to supply all educational equipment and material for the use of the pupils.

Each school attended by pupils of more than twelve years must have a gymnasium with bath and changing-room, and before the gymnastic lesson all pupils, apart from the very young, must change into gymnastic costume, which is to be provided by the school, if the parents demand it.

There must be rooms for woodwork and cookery, but not necessarily in each

school. It is sufficient that they are found in one of the schools of the town, where pupils from other schools can go once a week and get instruction, the boys in woodwork, the girls in cookery.

The local authorities receive Government grants covering about 60 per cent of the cost of school buildings and plant required by the Act of 18 May 1937.

Rural schools must as a rule be provided with housing for the staff of teachers.

IV. TEACHERS

The training of Elementary School teachers is provided by training colleges, eight of which are state institutions, while twelve are private, but subsidized by the state. Fees are charged in the latter, in the state institutions the training is free.

The course comprises four years. Admission is conditioned by the passing of an entrance examination, in which the requirements are somewhat greater than those of the examination middle school, but they must not include tests in foreign languages or physics.

Students that have, with a fair result, passed the 'Real' examination or the matriculation examination (Studentereksamen) can be admitted to the training colleges without any entrance examination, those that have passed the Matric. Exam. with special distinction can enter the second class and thus get their certificate in three years. Of a total of 658 entrants into the training colleges in 1948, 37 had passed the Matric. Exam., 343 the 'Real' Exam., while 66 students who had passed the Matric. Exam. were admitted immediately to the second class.

Owing to the present scarcity of teachers a temporary scheme has been adopted, enabling students who have passed the Matric. Exam. with a fair result to finish the training in 2½ years. In 1948 240 of such students were admitted.

In the two senior classes teaching is practised in an elementary school connected with the training college.

One foreign language — English or German — is a compulsory subject in the training college, and instruction in the second language is offered, too, in which a supplementary examination may be passed, but only in the case of students who, before entering a training college, have passed through an examination school with a good result, can the instruction be carried so far that the certificated teachers can undertake to teach foreign languages in the examination school.

The training of Women Teachers in Preparatory Schools takes two years. Admission is conditioned by an entrance examination less comprehensive than that demanded by the regular training colleges. The final examination covers only practice in teaching. Preparatory school teachers may only teach children below ten years of age.

The minimum age for teacher students is 17 years — for preparatory school teachers (women) 18 — so that the minimum age at the final examination is 21 years — in the case of preparatory school teachers 20. Nobody, however, can get an appointment as head teacher or sole teacher at less than 25 years of age.

Vacancies in rural schools are advertized by the School Directorates, in urban schools by the Town Council. The education committee nominates three candidates between whom the appointing authority makes its choice. If the nomination by the Education Committee of one of the candidates is unanimous, he must be appointed, provided he is possessed of the necessary qualifications.

The appointing authority is in the country the School Directorate, in the towns the municipal council. The appointments, however, must be approved by the Ministry.

Headmasters of municipal schools (Skoleinspektører) are appointed by the King on the recommendation of the Ministry. Among the candidates for a headmastership the Education Committee has to nominate five, between whom the Minister makes his choice.

Teachers are dismissed by the appointing authority unless they retire because of weakliness or they are dismissed without application in which case they are dismissed by the Ministry of Education.

In case a state of antagonism should arise between a teacher and the parents and school authorities, and provided the Education Committee and the municipal council by a majority of three quarters of the members of the two assemblies vote for his dismissal, the question is inquired into by a committee consisting of the Prefect of the county, a representative appointed by the Ministry, and another selected by the County Council. If they refuse to dismiss him, he will remain in office; if they consider the complaint so well-founded that it will be unjustifiable to let him remain in office, he will be dismissed, either on a retired allowance (unless it is principally he that is responsible for the misunderstanding) or on usual pension.

V. GOVERNMENT GRANTS

The grants made by the Government to public elementary schools consist of contributions to teachers' salaries and pensions, on an average amounting to one half of this expenditure. Besides the State pays one half of the administrative expenses of the School Directorate, the salaries of the County Educational Advisers, etc.

In the financial year 1951—1952 the total grants to public elementary schools are estimated at 108 million kroner.

VI. STATISTICS

On 1 January 1947, 427.341 pupils attended public elementary schools. The total number of pupils in municipal, state, and private schools was 481.395. Of the pupils in the elementary schools 384.801 were in non-examination classes, 42.540 in the classes of the examination departments.

There were 222 urban schools, 3410 in rural parishes, besides 100 in Copenhagen — altogether 3732 schools.

The number of teachers was:

In towns	2511	men	teachers,	1587	women	teachers
In rural parishes	5075	—	—	2927	—	—
In Copenhagen	1806	—	—	1667	—	—
Total	9392	men	teachers,	6181	women	teachers

or altogether 15.573 teachers, not including special, part-time teachers.

B. Private Elementary Schools.

Besides private examination schools, which will be mentioned in the next section, there are in Denmark a number of private non-examination elementary schools (Friskoler).

According to our Constitution parents are not compelled to send their children to a public elementary school, but they are bound to see that their children somehow get an education not inferior to that provided by the public elementary school.

Private elementary schools generally owe their origin to distinctive religious or pedagogical views. Their position is very free, they are as a rule not supervised by the local authorities, but can choose their own inspector, who, moreover, only has to see that the standard of instruction in Danish, written and oral, writing, and arithmetic is satisfactory. The other subjects of the public elementary school must also be taught, but only the principal of the school is responsible for the quality of this instruction.

The schools receive considerable grants — as much as 80 per cent of their expenditure.

There were in 1948 in rural districts 177 private elementary schools with 5860 pupils, in provincial towns 38 with 2333 pupils, and in Copenhagen 13 with 1905 pupils, altogether 228 schools with 10.098 pupils. The recent Private Elementary School Act (12 July 1946), however, has considerably increased the grants, which did not formerly approach the figure given above, and both the number of schools and of pupils attending them may therefore be expected to rise in the years to come.

C. Secondary Education.

I. STRUCTURE

Since the passing of the Secondary Education Act of 24 April 1903, which is still in force as far as the structure and content of this education is concerned, the Danish secondary schools are called Higher General Education Schools (højere almenskoler), in contradistinction to various more or less vocational schools open to adolescents after leaving the public elementary school (commercial schools, technical schools, etc.).

The secondary school comprises two parts: the middle- and 'Real' school and the senior school (in Denmark called Gymnasium). The middle school comprises four classes, covering the ages from 11 to 15, to which is added a ‚Real' class. The middle school leads to the middle school examination, and the ‚Real' class to the 'Real' examination, passed at 16 years of age. The senior school is a direct continuation of the middle school and leads through three classes (corresponding to fifth, upper fifth, and sixth forms) to the school leaving examination, Studentereksamen (Matriculation Examination), passed at 18 years of age. The senior school is through all three forms divided into three sides: The classical side with Latin and Greek as main subjects, the modern side with English and German, and the science side with mathematics and physics as main subjects. By a so-called Complete Higher General Education School is meant a school comprising both middle school (with 'Real' class) and senior school. Such schools are usually called Gymnasie schools. It is a rule never departed from that a senior school cannot exist alone. A Gymnasie school must always comprise a middle school (and possibly, Real' class) and a senior school and constitute an organized entity with one headmaster and one staff, as is expressly stated in the Elementary Education Act in respect of the municipal secondary schools.

These higher general education schools, comprising middle- and ‚Real' school and senior school, are state, municipal, or private schools. The state runs only Gymnasie schools. By the Elementary Education Act of 18 May 1937 the municipal middle school has become an integral part of the elementary school, in the Act described as the examination middle school, to distinguish it from the non-examination middle school established by the Act, whereas the municipal ‚Real' and senior secondary school classes are not looked upon as part and parcel of the elementary school, but of "the municipal school system". Thus municipalities run both middle- and 'Real' schools and Gymnasie schools. Both kinds of schools are also run as private enterprises. Three of the state Gymnasie schools, one municipal, and five private Gymnasie schools are wholly or partially boarding-schools, all the others are days schools. Nine middle- and 'Real' schools are boarding-schools.

The majority of secondary schools are co-educational, and there is a tendency to alter boys' and girls' schools into mixed schools. Newly established Gymnasie schools are always co-eductional. The underlying principle is that girls should have the same facilities for education and livelihood as boys. Moreover, co-education is an old tradition in rural schools, though not always in municipal elementary schools. It deserves notice, however, that since 1 April 1945 the City of Copenhagen is about to introduce co-education in its elementary schools. The Secondary Education Act offers facilities for a special education of girls. It concerns only the junior, not the senior classes, and differs from the normal plan of education especially by the insertion of an extra class (a so-called rest year). In this type of school there is no middle school examination, but the schooling ends with a so-called girl' school examination (at seventeen years of age), which in its main features corresponds with the 'Real' examination. There are now only three private Gymnasie schools and one state Gymnasie school for girls that follow this system. In the latter it is even being liquidated.

Scattered about the country are still found, beside the middle- and 'Real' schools, as remains of an earlier 'Real' school, a not inconsiderable number of so-called preliminary schools, preparing for the general premilinary examination, at 16 or 17 years of age, which confers essentially the same rights as the 'Real' examination. This type of school normally comprises four or five one-year classes. There have formerly been great variations in the structure of the municipal preliminary schools, but gradually the four or five year preliminary school will become the rule in municipalities that wish to retain the type. In the country, on the other hand, more and more two-year preliminary courses are being established (according to § 2, section 2, of the Elementary Education Act). The curriculum is the same as that of the middle- and 'Real' school. Regulations concerning the instruction were revised in 1944 and were approached to those in force for middle- and 'Real' schools.

II. RIGHTS CONFERRED BY SCHOOL CERTIFICATES

No particular rights are connected with the middle school examination, beyond it being the necessary condition of being transferred or removed into the first form of the senior school. The 'Real' examination, the preliminary examination, and the girls' school examination certificates qualify, in conjunction with certain supplementary tests, for admission to higher vocational institutions (the College of Engineers, the School of Pharmacy, the School of Dentistry, etc.) and give direct admission to various inferior vocational schools (commercial schools, etc.), but more often pupils who have passed the 'Real' examination or similar examinations immediately enter into pratical life, into handicrafts and commerce, etc., or into the civil service. It is no rare occurence that pupils who have passed the 'Real' examination or similar examinations seek admission to the first form of a senior school in order to obtain the Studentereksamen Certificate (corresponding to the Higher School Certificate) after three years' preparation. But such pupils may also get the Certificate in two years through attending a Gymnasie

course. The Studentereksamen Certificate qualifies for matriculation at the Universities and other colleges for advanced education. On account of lack of accommodation admission is limited (numerus clausus) to the College of Engineers, the School of Pharmacy, the School of Dentistry (and the Veterinary and Agricultural College), but not to the Universities.

III. CURRICULUM AND SYLLABUS

It will be seen that, apart from the variants offered by the preliminary schools, the Danish education system is very uniform in its structure and organisation. The same Act, of 24 April 1903, applies to all higher general education schools (middle- and 'Real' schools and complete Gymnasie schools), also to municipal and private middle schools. With few variations the time-tables are the same, based on a standard time-table framed by the Ministry, and the purpose and content of the education have also in their main features been settled by administrative regulations, while the curriculum has been settled by the Act.

Contrary to what is the case with the Elementary Education Act and the departmental circular that accompanied it, neither the Secondary Education Act nor the administrative regulations (royal decrees and departmental directions) contain any definition of the aim and the spirit of the secondary education. But it appears from the directions of the Ministry concerning the content and the methods of instruction in individual subjects, in particular in the native language and in history, that the higher school education should be given in a liberal and humanistic spirit.

The middle school curriculum comprises besides the usual elementary subjects (Scripture, Danish, History, Geography, Natural History, Physics, Arithmetic, Writing, Drawing, Physical Training, Needlework, and Singing) English, German, and Mathematics. The school may choose either English or German as the main foreign language. On the standard time-table 15 hours of instruction (6 + 3 + 3 + 3) are set aside for the main language, 13 for the second language. There is a long tradition, which the German occupation did not alter, for English as the main foreign language in the middle school. Among the requirements is also some knowledge of Swedish and of chemistry. Further it was provided by the Act of 4 July 1942 about domestic science schools and domestic science training colleges that by 1 April 1948 instruction must during the two last years of the compulsory school attendance be given in housewifery, a subject which has not hitherto been obligatory. Delay of introduction of this subject has been prolonged to 1 April 1958. Further, schools are allowed to include woodwork in the curriculum, and most of them do so. French and Latin are optional subjects in the top form of the middle school.

Compulsory subjects in the 'Real' class are: Danish, two modern languages (English, German, French), practical arithmetic and mathematics (only compulsory on boys), certain sections of physics, history, geography, natural history, and physical training. The curriculum may comprise other subjects besides.

The standard time-table of the senior school is as follows:

The Classical Side.

	I	II	III
Religious Instruction	1	1	1
Danish	4	4	4
History	3	3	4
Greek	6	6	6
Latin	5	5	6
Ancient Literature and Art			1
English or (and)German	3	3	
French	4	4	4
Geography, Physiologi, Biology		2	4
Physics	2		
Mathematics	2	2	
	30	30	30
Physical Training, Singing, etc.	6	6	6

The Modern Languages Side.

	I	II	III
Religious Instruction	1	1	1
Danish	4	4	4
History	3	3	4
English	5	5	5
German	4	4	4
French	4	4	4
Latin	4	4	3
Ancient Literature and Art	1	1	1
Geography, Physiology, Biology		2	4
Physics	2		
Mathematics	2	2	
	30	30	30
Physical Training, Singing, etc.	6	6	6

The Science Side

	I	II	III
Religious Instruction	1	1	1
Danish	4	4	4
History	3	3	4
Mathematics	6	6	6
Physics	6	6	6
English or (and) German	3	3	
French	4	4	4
Ancient Literature and Art	1	1	1
Geography, Physiology, Biology	2	2	4
	30	30	30
Physical Training, Singing, etc.	6	6	6

The requirements are the same for the three sides in religious instruction, Danish, history, biology, physiologi, and French, for the classical and the modern languages sides in geography, mathematics, and physics, for the science and modern languages sides in ancient literature and art, and for the classical and the science sides in English and German (Schools may choose to give instruction in English and German, or in only one of the languages). On the modern languages side English or German may be made the main subject. Practically all schools have English for the main subject, a fact that was not altered by the German occupation, any more than in the middle school.

Attention is drawn to the fact that curriculum and syllabus of the Secondary Schools are at present being revised.

IV. SCHOOL EXAMINATIONS

To the general rule that in the examinations all subjects but religious instruction, physical training, singing, and housewifery are to be tested, there are two exceptions: From the middle school examination each school may every year cut out one or two subjects which are not to be tested orally, and in the Studentereksamen (Matric. Exam.) three or four subjects are in each school not subjected to oral testing. The decision which subjects are to be exempted, varies from school to school and from year to year and rests with H. M. Inspector, who, about a week before the beginning of the oral examinations, sends to each school the program of the school examinations.

The final examination in English and (or) German on the classical and the science sides, in mathematics, geography, and physics on the classical and the modern languages sides, and in geography on the science side, is held at the termination of the second Gymnasie class, in all other subjects at the termination of the third Gymnasie class.

In the middle school examination there are written and oral tests in Danish and arithmetic with mathematics, in the 'Real' examination in Danish, arithmetic with mathematics, and in English or German, in the Studentereksamen in Danish on all sides, in Latin on the classical side, in English and German on the modern languages side, and in mathematics on the science side. The papers are written on the same day and the same hours in all schools. The written papers in the middle school examination are marked by the teacher and one external examiner appointed by H. M. Inspector, in the 'Real' examination and the Studentereksamen by two external examiners. In all other subjects there are only oral tests. The examiner is the teacher and the performances are assessed and marked by the teacher and an assessor, who in the middle school and 'Real' examinations is either appointed by H. M. Inspector or has been proposed by the school and approved by H. M. Inspector. In the latter case he may be a member of the school staff. The assessors at the oral tests in the Studentereksamen are always appointed by H. M. Inspector and never belong to the staff of the school where they function. They are selected from among the whole number of Gymnasie school teachers. Only quite exceptionally is a University professor appointed.

The assessment of the individual performance of a candidate is expressed by a figure (marks). The total examination result is expressed by an average, in the determining of which the teacher's estimate of the pupil's attainment, also expressed by a figure settled before the examination, has the same weight as the examination marks.

No examination is held (and no marks are given) in religious instruction, physical training, singing, and housewifery. In physical training and housewifery estimates are given, which count in the examination results. In singing an estimate is given, which does not count. There is neither estimate nor examination in religious instruction.

The questions set in the examination papers (the same for all schools) are drawn up by two committees, one for the middle school, the 'Real', the girls' school, and the prelinimary examinations, and one for the Studentereksamen. The chairmen of the committees are respectively H. M. Inspector of middle- and 'Real' schools and H. M. Inspector of Gymnasie schools. The other members of the two committees are teachers (at least two for each subject) and are appointed by the Ministry of Education.

V. ADMINISTRATION AND SUPERVISION

The central controlling authority is the Ministry of Education, assisted by the two State Inspectors. While all questions regarding the state schools are to a great extent decided by the central authority, its powers are considerably restricted with regard to private and municipal schools. In these the principals of the schools and the local authorities respectively have wide autonomy. This is especially true of the municipal schools of Copenhagen. As far as the private schools are concerned, the chief aim of the control of the central authority is to see that the education provided is of a reasonable standard. The regulations concerning the administration of municipal schools by the local authorities have been mentioned in section A of this survey. It should be added, however, that special reservations have been made to secure to the Inspectorate influence on appointment of headmasters and teachers, and on planning of education.

The state supervision is entrusted to the two Inspectors, H. M. Inspector of middle- and 'Real' schools (and preliminary schools), and H. M. Inspector of Gymnasie schools. Both of them have practical knowledge of school teaching. The inspectors supervise the schools and advise the Ministry. The supervision comprises all categories of secondary schools: state, municipal, and private examination schools, in the case of the municipal schools, however, supplemented by the supervision of the local school authorities. They are assisted by a number of practising specialist teachers. The two inspectors arrange the examinations in the examination schools under their control and are chairmen of the committees appointed by the Ministry to conduct examinations of privately prepared students. At the request of the Ministry they have to state their opinion on school questions, for instance on questions of appointment, promotion, and dismissal of teachers, exemption from regulations regarding education and leaving examinations, etc.

The Inspectors can, at any time, submit to the Ministry reports regarding new departures or alterations of the regulations within their scope. H. M. Inspector of Gymnasie schools is director of the practical training of academic teachers.

VI. TEACHERS

The normal qualification for being appointed teacher in a Gymnasie school is the University degree of M. A. The course of study in the Faculty of Arts has hitherto taken on an average seven or eight years and comprised one main and two subsidiary subjects. Recently, however, the course has been reduced to comprise two subjects only, a main and a subsidiary one, which alternation is expected to shorten the course of study materially. The Faculty of Science grants degrees in the mathematics — chemistry — physics group and in the natural science group. In the case of the former group a five year, in the latter a six year is the average. In addition all the graduates have to go through a course in practical teaching and another in the theory of teaching and in school hygiene. Both courses can be taken simultaneously and are reckoned to extend over one term (of six months). Not infrequently are these courses taken during the undergraduate years. The course in the practice of teaching, which is under the direction of H. M. Inspector of Gymnasie schools, is held in various Gymnasie schools according to his decision. The academic title of a graduate is candidatus magisterii (cand. mag.).

An elementary school teacher's certificate is in itself sufficient qualification for appointment in a municipal middle- and 'Real' school (if it is not part of a Gymnasie school). In practice, however, it is usually supplemented by courses in one or more subjects, especially in the foreign languages English, German, and French. These courses are most often provided by the Danish Teachers' High School in Copenhagen, an institution of great importance for the further training of elementary school teachers. Provided a local authority nominates an academic teacher (cand. mag.) to a mastership in a municipal middle school, exemption by the Ministry is required, and it is always granted.

No special qualification is required for appointment in private middle-and 'Real' schools. Still, the majority of the teachers are certificated elementary school teachers with special training in one or more subjects. Of late years several academic teachers have sought employment in these schools, because of over-production of University graduates.

Gymnasie school teachers are Adjunkter or Lektorer (lower or higher grade teachers). Besides there are in nearly all Gymnasie schools a small number of middle school teachers (non-academic teachers). A post as higher grade teacher (Lektor) is obtained through promotion, normally after 12—15 years' satisfactory work. The headmaster of a Gymnasie school is called Rektor. A municipal middle- and 'Real' school is under the same management as the elementary school of which it is part. The headmaster is called school inspector. The staff of teachers is wholly or partly common to the middle- and 'Real' school department and the elementary school department (main school and non-examination middle school). Headmasters of state and municipal Gymnasie schools, as well as the above men-

tioned school inspectors, are appointed by the King, with the exception of headmasters of municipal Gymnasie schools in Copenhagen, who are appointed by the School Directorate. Appointment of headmasters of private Gymnasie schools must be approved by the Ministry. Higher grade teachers (Lektorer) in state Gymnasie schools are appointed by the King. Promotion to higher grade teacher and appointment as lower grade teacher (Adjunkt) in a municipal or private Gymnasie school must be approved by the Ministry. The Copenhagen School Directorate has autonomy regarding appointment of lower and higher grade teachers, as well as of headmasters.

VII. SCHOOL MANAGEMENT

The leading organs of a Gymnasie school are the headmaster and the school council (the staff assembly). State Gymnasie schools and the old foundation of Herlufsholm have immediate right of holding leaving examinations (and awarding school certificates). In municipal and private Gymnasie schools and in municipal and private middle- and 'Real' schools this right is by the Ministry vested in the heads of the schools for a certain number of years at a time. By virtue of this the heads of the municipal examination schools (headmasters of Gymnasie schools, school inspectors of middle- and 'Real' schools) have certain special powers, by which the powers of the Education Committees are modified. Questions regarding the day-to-day working of the school are decided by the headmaster, as are also such mainly economic questions as are left to the school to decide, whereas important educational questions come within the province of the school council. Certain decisions of this kind, however, are expressly reserved to the headmaster as for instance admission of new pupils. In the state schools the headmaster is chairman of the school council. The teachers' council in municipal Gymnasie schools has the same powers as the school council of the state Gymnasie schools, but chooses its own chairman.

In every state school has since 1918 existed a so-called Skolenævn (school board), composed of two members elected by the school council and four elected by and among the parents of the pupils, with the headmaster for its chairman. The authority of this body is strictly limited. It may only discuss subjects of a general character, not questions that concern individual pupils or teachers, nor appointment of headmaster or teachers. In the municipal Gymnasie schools there are, just as in the elementary schools, boards of governors with somewhat greater powers; but the boards of governors of the municipal Gymnasie schools do not take part in nomination of candidates for headmasterships and masterships.

In a very few Gymnasie schools there has of late years been introduced a sort of prefect system. Other schools experiment with various systems giving the pupils of the top forms some degree of responsibility for certain aspects of the school discipline. But in general pupils have no influence on the conduct of the school.

VIII. SCHOOL FEES

In the state Gymnasie schools, including Sorø Academy School, and in the Gymnasie, 'Real', girls' school, and middle school classes of the three Metropolitan municipalities of Greater Copenhagen (Copenhagen, Frederiksberg, and Gentofte) tuition is free for pupils whose parents' taxable incomes do not exceed 6.000 kroner. If a parent has more than one child under 15 years of age, or if he has children over 15 attending a public Gymnasie school, 1.500 kroner are deducted from his income for each child more than one. Yet no income of more than 7.000 kroner may be reduced to less than 6.050 kroner. The highest school fees are at present 25 kroner per month for a pupil attending the senior school or the 'Real' class, 24 kroner per month for a pupil in a middle school class (for incomes of at least 23.050 kroner). In the municipal Gymnasie, middle, and 'Real' schools outside Greater Copenhagen tuition is generally free; sometimes the schools follow the same rules as the state schools, or they have special, rather low rates.

IX. GOVERNMENT GRANTS

Considerable grants are made by the Ministry of Education to municipal and private Gymnasie, middle, and 'Real' schools.

In regard to Gymnasie schools outside Greater Copenhagen the state grant at presents amounts to one half of the average expenditure per Gymnasie school pupil in Greater Copenhagen. In regard to the private Gymnasie schools the grant formulas are at present being revised, which may be expected to result in greater grants.

The grant formulas in regard to municipal and private middle and 'Real' schools outside Copenhagen are rather involved. The grants are smaller than those made to Gymnasie schools, still they run into a considerable amount.

In Greater Copenhagen there is financial community between the state and the municipalities as to the whole of the higher public Education. The expenditure on education in the Gymnasie, 'Real', girls' school, and middle school classes of the Gymnasie schools run by the three municipalities is divided between the state and the municipality concerned in such a way that the state defrays two fifths and the municipality three-fifths.

X. STATISTICS

The population of Denmark was in 1948 c. 4.045.000. The total of children attending school was on 1 January 1947 481.395, of whom 73.710 attended examination schools (58.121 examination middle schools, 7.348 'Real' classes, 7.938 senior school forms). The senior school leaving examination (Matric. Exam., Studentereksamen) is passed by c. 3.000 students per year (c. 600 of them privately prepared), and the number is constantly increasing.

There are at present 34 state, 22 municipal, and 11 private Gymnasie schools; 183 municipal, and 105 private middle- and 'Real' schools; 30 municipal and 26 private schools preparing for the preliminary examination.

D. Further (non-vocational) Education.

The vocational and academic education provided by the two Universities and other colleges, and training for a profession, is beyond the scope of this survey.

By further education is therefore here meant a non-vocational education outside the school system (elementary, middle, and Gymnasie school) offered to young persons over the compulsory school age.

Further education is deeply rooted in Danish history. Even the Elementary Education Act of 1814 contained the provision that young people after Confirmation should be offered facilities for keeping up their school learning. The first people's high school for young adults was opened in 1844. By 1870 these schools had spread all over the country. Also some few boarding schools for adolescents (14—18 years), called after-schools, were founded at the end of the nineteenth century.

But the great progress in further education belongs to the twentieth century, in particular to the inter-war period.

I. EVENING SCHOOLS

The first Evening School Act was passed in 1930. The Act now in force is from 1948. It offers government grants for the education of any person over the compulsory school age. Evening schools may be established by local authorities, associations, or private persons. There are evening schools in nearly all towns and by far the greater number of villages. Most of the town schools are municipal, the rural schools are often due to the initiative of a village schoolmaster, but they are supported by the local authorities. The rural schools must be approved by the County School Directorate, the town schools by the Ministry of Education, those in Copenhagen by the Copenhagen School Directorate.

Practically all general educational subjects may be taught, provided that the instruction comprises at least 20 hours if only one subject is taught, at least 40 in the case of two or more subjects. Each course must on an average have been attented by 10 students per hour.

The curriculum of the evening schools includes besides general eductional subjects also practical subjects like gardening, woodwork, and needlework, together with semi-vocational subjects like type-writing, fishing, farming, and domestic work. The instruction must not, however, aim at any examination or give any regular vocational education, unless no other schools in the area provide special vocational education in the subject concerned. Apprentices in commerce and handicraft are trained in special apprentice schools.

ery year some 30.000 young women are taught domestic work in evening

schools, the majority of which have been established by women's associations, by associations of farmers and small-holders or by the Workers Educational Association.

According to the Act of 1942 Youth School Boards or Evening School Boards must be set up in all local areas. These boards have to state their views on the question of approbation of evening schools and have the duty of supervision. In rural areas the County Educational Adviser also supervises the evening schools. Besides, all evening schools are subject to inspection by the Government Youth Education Adviser.

The government grants to evening schools are partly a contribution of 70 per cent of a fixed minimum salary per hour (at present 6.60 kr. per hour) and partly 30.000 kroner annually towards provision of schooll materials. In addition the Ministry pays to each local area a contribution not exceeding 100 kroner towards fees to external lecturers and 75.000 kroner as a contribution to principals' salaries.

Approbation of a school, however, is conditioned by the school having secured a local contribution of at least 30 per cent of the fixed minimum salary, which must not be paid by the students, who may only be charged a small enrolment fee. The local contribution is in most cases paid by the local authority, which must pay the contribution if the Evening School Board recommends it. In addition the local authority is bound to provide accommodation with lighting, heating, and cleaning for the use of approved evening schools, whether they have been set up by individual persons or by associations. But it is a necessary condition of such provision of accommodation by the local authority that the courses are attended by at least 15 students, from which rule, however, the first course is excepted.

The evening school offers facilities to all who are over the compulsory school age. Less than one fourth of the students are under 18 years, one third between 18 and 25 years.

In the Act of 1942 a new provision was added about a special grant to evening schools in which the students are over 21 years of age, and whose courses concentrate on social and cultural subjects (civics, history, literature, etc.). Such schools called Evening Folk High Schools, in which work in study circles and lectures are the usual types of instruction, have of late years developed considerably.

As the Evening School Act does not make definite requirements in regard to type of teachers or reserve to the local authorities the right of establishing evening schools, it somehow encourages the whole of the population to set up schools for the enlightenment of youth. Though many local authorities have set up and run evening schools, the private initiative still plays a great part. There are innumerable school-masters, particularly in rural areas, who winter after winter take the lead and invite to participation in evening courses and personally give the school the form and the content they wish. It is not less important that organisations can avail themselves of the facilities offered by the Act and obtain public aid to the education they want to give their members. Political youth organisations

for instance make extensive use of the Act, and agricultural and small-holders' associations, domestic science associations, and housewives' associations have in the course of few years created a comprehensive domestic science education based on the Act. This is also the case with much of the work of enlightenment organized by the Workers' Educational Association.

The growth of the evening schools has been very rapid, especially of late years. The number of students was in 1932—33 83.156, in 1942—43 196.263, the hitherto highest figure, which number however may have been surpassed in 1948—49.

II. UNSKILLED ADOLESCENT EDUCATION

The Unskilled Adolescent Education Act was passed in 1942 and amended in 1948. The Act was based on the report issued by the Youth Education Committee appointed in 1939 by Jørgen Jørgensen, the then Minister of Education. It has for its background partly the increasing industrialism and mechanisation of the inter-war period, which to a great extent rendered skilled labour superfluous and created a great number of juvenile unskilled workers, partly a beginning realization og the fact that young persons who are not apprenticed to some trade are in need both of the moral and of the vocational support a school can give.

The *youth school* therefore pursues a double purpose. It endeavours to give the adolescents an orientation in the industrial life they have become members of, and at the same time to show them how through their work they are citizens in a community and have the rights and duties of citizens.

According to the Act all towns and larger built-up rural areas are bound to set up youth schools, whereas attendance on the part of the adolescents is voluntary.

Most towns obliged to establish youth schools have got them started (c. 110). Besides about 25 villages have set up youth schools.

In most towns the education is given in evening courses two or three times a week, each time with two or three hours of instruction. In the villages the education is as a rule concentrated on one day in the week from about 2 to about 9 p. m.

The Act requires the courses to comprise at least 180, at most 360 hours. In a day school they need not extend over more than 150 hours. Besides as day schools and evening schools youth schools may be established as boarding schools, whose courses must extend over at least two months. There are three youth boarding schools.

The courses of the youth schools must be free of charge for the pupils. The minimum salary of a teacher must be 6.60 kr. an hour, of which the Ministry pays 3.30, the local authority the remainder, also in case the school has been founded by private persons. In addition the Ministry makes grants as contributions to principal's salary and to educational material. The remainder is paid by the local authority, which also has to provide accomodation with lighting, heating, and cleaning.

It is provided in the Act that, wherever a youth school is to be established, a special Youth School Board (Ungdomsskolenævn) must be set up, which

fixes the syllabus, supervises the teaching, and appoints the teachers (not, however, in private schools). The plan of education must be approved by the Ministry, which also, through the Government Youth Education Adviser, supervises the education.

The education given in at least 40 (in day schools 30) hours of instruction must have a practical bias and aim at giving the pupils some orientation as to the work they are engaged in, or which some day they will be engaged in. On the other hand the education should not be vocational or technical, but of a general and social type.

The practically-biased education of young girls comprises as a rule housewifery (cookery), to which is nearly always added a course on "Home Economy and Materials". The subject of "Housing" has been very popular.

The practically-biased education of boys generally consists in a course on labour (production and tools). As most of the pupils will sooner or later become unskilled labourers, teachers have endeavoured to procure interesting and at the same time educational subject-matter from the various specialities of unskilled work (for instance: excavation, concrete work, housebuilding, etc.), and courses have been given on important implements and machines (steam engine, petrol engine, tackles, etc.). This education often takes the form of a sort of civics with information and discussions about the various trades and their importance to the Danish community as a whole.

Two or three hours of instruction a week are generally left, to be used for free subjects, most often hygiene or gymnastics alternating with literature and citizenship.

The motive power behind the new youth school is the realization that it is a question of guiding young persons who are in the habit of spending their lives in the streets into a more valuable way of life. It has therefore been intended to make the school a place where they would feel at home and spend part of their day in the company of comrades and teachers interested in their welfare. In many youth schools it has been tried to add a leisure club to the school, or the pupils gather regularly for the purpose of seeing films or hearing lectures. Sometimes there are social evenings arranged by the pupils themselves, where coffee is served. In several schools Old Boys' (Girls') Associations have been formed. The teaching activities of the school are suspended during the summer, but the school tries to keep alive contact between the pupils by inviting them to excursions, sports, meetings, etc. The Ministry looks upon such "leisure arrangements" with great favour and subsidizes them in the same way as the class work.

In the course of the years since 1942 valuable experiences have been made, and the idea of a special youth school has crystallized and gained ground.

III. PRIVATE CONTINUATION SCHOOLS

Private continuation schools or "After-Schools" (Efterskoler) as they are called, are schools for young persons between 14 and 18 years of age. They are as a rule boarding schools providing a five months' winter course and a

three to five months' summer course. They are all private institutions, owned either by the school principals or by voluntary bodies. It is often the country population of a district that has founded and built the school. Generally the principal chooses his own teachers and arranges the courses independently. The school must have received support either from the county or from the parish.

Government grants to After-Schools, rather small indeed, were first made by the Act of 1930. The Act of 1942 greatly increases them. Each school receives a basis amount of c. 1.000 kr. a year, and beyond that the Ministry pays about one half of the teachers' salaries, a small contribution to covering expenditure on educational material, and a building contribution amounting to 2¾ per cent of the value of the school buildings. The Ministry pays maintenance allowances to the pupils at the rate of about 50 kr. a month per pupil. At present the monthly school fees of a pupil (for board, lodging, and instruction) are about 140 kr. The schools are subject to inspection by the Government Youth Education Adviser.

The number of "After-Schools" has greatly increased in recent years. In 1930 there were 40 of them, in 1949 there are 70. Apart from a few in Copenhagen and some provincial towns, all the After -Schools are in the country, and they owe their progress to the country population. The total number of pupils is c. 4.100 a year. Life in such a school is of a simple, homelike character, with close contact between teachers and pupils. During the two last decades several schools have grown considerably and have now about a hundred pupils per course.

The "After-School" attaches great importance to practical subjects, such as woodwork, housewifery, needlework, and weaving. But great attention is also paid to developing skill in reading and arithmetic, and lectures on history, geography, and literature play a great part too, which shows how closely related these schools are to the people's high schools. In fact, they can be best characterised as people's high schools for young persons in the years of puberty.

Still, the "After-School" is a quite independent school type. Its pupils are neither like the adults in the people's high schools nor like the children in the elementary schools. Its task is to adapt a special education to the requirements of young persons at the difficult age of puberty. The increasing interest shown by people in these schools proves that they have succeeded in gaining the appreciation of their pupils and the confidence of the parents.

IV. THE PEOPLE'S HIGH SCHOOL

People's high schools, like the "After-Schools", are found scattered all over the country. There are 59 of them. They are boarding schools, which as a rule offer five or six months' winter courses to young men and three or four months' summer courses to young girls. The winter courses of several schools, however, are attended by both men and women. The average age of the students is over 20 years. The annual attendance is c. 6.400.

The people's high schools are open to all men and women over 18 years of

age. There is no entrance qualification, and they do not prepare for any examination. The idea is not that, after attending the courses, the students should give up the trades they have hitherto followed.

The people's high schools owe their success to the country population. The great majority of the students are country people, though the number of young attendants from the towns has been increasing. There are two Workers' High Schools and an International High School with students and teachers from various countries. There are a number of schools which specially go in for gymnastics or nursing, but the great majority aim merely at giving a general education.

All the schools are private. Many are owned by the principals, though in recent years more and more have become self-supporting institutions. In most cases it is the population in the neighbourhood of the school, in conjunction with pupils and friends of the school, who, at great economic sacrifices, have rendered it self-supporting.

When a new school is started or in the case of change of principal, the school must, if it wishes to be subsidized by the Government, obtain the approval of the Ministry to principal, school premises, and plan of education. Practically the only demand made by the Ministry as to education is that it should be of a general character and not prepare for any examination. It is the principal alone that organises the teaching, appoints and dismisses teachers. Each school is a kind of small, almost independent community, kept alive by the ability of the principal and his staff to attract pupils.

A school can from its start be approved as qualified for receiving pupils with maintenance grants from the Government. The school fees, covering board, lodging, and instruction, are at present about 150 kr. a month; the maintenance allowance to an indigent student may be as much as about 100 kr. a month, but generally it is 50 kr., and about 40 per cent of the students do not receive state aid.

The Government grant made to a school consists, pretty much as in case of the "After-Schools", of an annual basis amount of 1.000 kr., a building contribution of 2¾ per cent of the value of the buildings, a contribution of about one half of the teachers' salaries (here, as in the "After-Schools", they must not be below a certain minimum, nor will any contribution be given to cover the amount by which they may exceed the scale adopted by the State Training Colleges), and 35 per cent of the cost of educational material. Finally, the Ministry pays, as well to principal as to teachers, increments of salaries, rising after five years' service from 600 kr. to 1.200 and 1.800 kr. after 15 years. When new "After-Schools" or people's high schools are erected, or if existing schools add new buildings or are made self-supporting institutions, the Government may grant a 4 per cent loan, not to be called in or repaid in instalments, of as much as one third of the value of the buildings.

Though, as will have been seen, the State makes very considerable grants to the people's high schools, they are left absolutely free as to organisation of education and their daily life in general.

The people's high schools are subject to inspection by the Government Youth Education Adviser. In accordance with the traditional freedom of the schools, the inspector does not interfere in the education, but makes himself acquainted with the conditions of the school, its staff, and its principal.

The education provided by the schools has principally aimed at awakening in the pupils an interest in the history and spiritual life of the Danish people. The growth of the schools has during a century run parallel to that of Danish democracy and religious and social popular currents. They wish to be centres where young adults in intimate companionship with comrades and teachers can become acquainted with Danish social and cultural life in such a manner that they are brought into personal relations to it.

Lectures in which, by connecting the present with the past, the teacher can throw light on the burning problems of our own time, have always played a great part in the people's high schools. It is also considered to be of importance that certain hours should be set apart for work in study circles, for free conversation and discussion. It is in good keeping with the conditions of a democratic system of government that the people's high schools should endevour to turn the eyes of the young people towards things that concern the whole people rather than one particular group or class, and towards simple human fundamental questions.

V. AGRICULTURAL SCHOOLS

Towards the end of the nineteenth century a number of agricultural schools and small-holders' schools sprang up in connection with the growth of the people's high schools. In 1949 there were altogether 20 agricultural schools and 5 small-holders' schools. To these must be added 2 gardening schools.

These schools, too, are boarding schools for adults over 18 years. They are state-aided according to the same Act as the people's high schools. The instruction imparted, in courses of five, six, or nine months' duration, is vocational in character. The courses of the small-holders' schools, as a rule established by small-holders' associations, are as much of a general as a vocational character. The summer courses for young girls provided by these schools resemble very much the summer courses for young girls provided by the people's high schools.

VI. DOMESTIC SCIENCE COLLEGES

From the beginning of the present century a number of domestic science colleges have arisen, which have for their special purpose the training of young girls in the discharge of household duties. There are at present 34 scattered over the country. The annual number of attendants has these last years been c. 2.400.

They are boarding schools providing two annual courses, a winter and a summer course, both usually of five months. They aim at giving practical as well as theoretic instruction in housework, supplemented by a certain general education.

There is no entrance qualification, but gradually as the training in housewifery, required by the Elementary Education Act of 1937, during the last two years of the compulsory school attendance, is beeing effected, and the three-year courses in housework started by the evening schools are beginning to make progress, the domestic science colleges will in some years have a good foundation to build on.

As to Government grants the same rules are followed as in the people's high schools. This is also true as regards maintenance grants to pupils.

There are three Training Colleges for teachers of domestic science in domestic science colleges and of housework in evening schools. All of them are private concerns. They provide two-year courses preparing for a certificate examination. They receive Government grants according to the same rules as private training colleges for elementary school teachers. Pupils can obtain public aid to cover fees and maintenance.

In the University of Aarhus advanced courses of five months have been instituted for certificated teachers of domestic science. These courses are also attended by students from the other Scandinavian countries.

VII. AGRICULTURAL COURSES

By an Act of 10 March 1938 vocational agricultural training was instituted for farm hands. The courses are designed for young persons, who have not attended any agricultural school, and they are held in the afternoon or in the evening so as to make it possible for the pupils to attend the courses without neglecting their duties on the farms.

In order to be recognized as efficient, the courses must have been established or recommended by some agronomical society and are thus closely connected with the agricultural associations. They are mainly held in the winter half and must, to obtain Government grants, comprise at least 30 hours and be attended by an average of at least 20 pupils. The grant varies with the number of hours and students and is somewhat higher for day courses (closing by 7 p. m.) than for evening courses.

The instruction is only theoretic, serving to illustrate the work the pupils have to do with every day.

While to begin with the agricultural courses comprised about a hundred classes numbering c. 4.500 students, the attendance rose during the last war to c. 400 classes and c. 13.000 pupils. In 1948 there were c. 300 classes with c. 9.000 pupils.

It is a feature common to all the schools mentioned, evening schools, youth schools, continuation schools, people's high schools, agricultural schools, domestic science colleges, and agricultural courses, that they are voluntary. The pupils may apply to the schools for enrolment, as they like, and they may, also nearly as they like, leave them again. This calls for very considerable ability on the part of the teachers, who must know how to arouse and hold the interest of the pupils. But then the teachers have very free hands; there are no examinations and little in-

spection. There is a great chance of teacher and pupils meeting each other in collaboration.

The freedom and voluntariness result in these school types being more open to the fluctuating mental currents of our time, to new subjects and new methods, which creates a strong interaction of the life of the school and that of the community.

Each pupil, on leaving school when the compulsory school age is at an end, is handed a pamphlet containing information of the further educational facilities that are offered.

TDV İSAM
Kütüphanesi Arşivi
No 059-126/4

TDV İSAM
Kütüphanesi Arşivi
No 059-126/5

SÄRTRYCK UR

STATISTISK ÅRSBOK

1952

TAB. 279—298,

RÄTTSVÄSEN OCH FÅNGVÅRD

STOCKHOLM 1952

KUNGL. BOKTRYCKERIET P. A. NORSTEDT & SÖNER

TDV İSAM
Kütüphanesi Arşivi
No 059-126/5

SÄRTRYCK UR

STATISTISK ÅRSBOK

1952

TAB. 279—298,

RÄTTSVÄSEN OCH FÅNGVÅRD

Tab. 279. Protesterade växlar åren 1942—1951 *Protested bills*

Uppgifterna avser endast accepterade och egna växlar, protesterade av notarii publici på grund av bristande betalning.

År *Year*	Hela riket *The whole country*				Därav *Thereof*					
	Antal växlar *Number of protested bills*			Belopp *Amount*	Stockholm		Göteborg		Malmö	
	på högst 1 000 kr. *1 000 kr. or less*	på mer än 1 000 kr. *Over 1 000 kr.*	Samtliga *Total*	1 000-tal kr.	Antal	Belopp 1 000-tal kr.	Antal	Belopp 1 000-tal kr.	Antal	Belopp 1 000-tal kr.
1942	14 317	1 818	16 135	8 520	3 460	2 411	1 066	589	558	278
1943	12 719	1 641	14 360	8 434	3 461	2 385	814	468	402	351
1944	14 718	2 071	16 789	9 991	4 203	2 788	811	544	408	246
1945	15 834	2 431	18 265	11 800	4 680	3 618	1 090	733	521	359
1946	18 271	3 802	22 073	18 143	5 278	5 860	1 401	1 223	690	538
1947	23 090	5 373	28 463	25 369	5 669	6 867	1 679	2 340	1 027	1 045
1948	22 524	6 590	29 114	30 759	5 930	8 100	1 620	1 927	1 272	1 322
1949	21 805	6 498	28 303	29 550	5 788	8 301	1 658	2 010	1 173	1 108
1950	21 059	6 988	28 047	32 520	6 026	9 749	2 143	3 319	1 193	1 429
1951	20 617	7 031	27 648	31 675	5 655	8 214	1 842	2 571	1 191	1 125

Tab. 280. Konkurser, konkursärenden och ackordsförhandlingar utan konkurs åren 1941—1950 *Bankruptcies, etc.*

	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Konkurser tillkomma under året *New-declared*										
Häradsrätter	548	356	303	295	312	303	343	450	506	554
Rådhusrätter	767	542	446	449	467	434	435	568	552	588
Summa	1 315	898	749	744	779	737	778	1 018	1 058	1 142
Konkurser upphörda under året *Terminated*										
Genom slututdelning	941	577	354	315	287	296	235	272	388	459
» avskrivning[1]	714	547	451	422	450	428	400	513	544	568
» förlikning	40	31	28	23	16	18	16	26	29	21
» ackord	4	1	2	3	1	3	2	5	6	3
Summa	1 699	1 156	835	763	754	745	653	816	967	1 051
Konkurser balanserade till följande år *Balanced*										
Inkomma under året	539	336	305	311	330	315	387	525	542	612
» » föregående året	213	135	86	73	73	107	112	158	217	207
» » året därförut	36	57	37	27	27	10	53	57	55	84
» » tidigare år	18	18	24	22	25	19	11	19	25	36
Summa	806	546	452	433	455	451	563	759	839	939
Konkursansökningar, förfallna, ej upptagna eller avslagna *Applications rejected, etc.*										
Häradsrätter	591	483	363	393	392	421	442	662	764	962
Rådhusrätter	2 353	2 118	2 235	1 876	2 142	2 208	2 134	1 901	1 419	3 234
Summa	2 944	2 601	2 598	2 269	2 534	2 629	2 576	2 563	2 183	4 196
Ackordsförhandlingar utan konkurs, avslutade under året *Transactions without bankruptcy*	11	4	5	5	5	3	6	6	8	7

[1] Häri ingår konkurser, som upphört i följd av konkursbeslutets hävande.

Tab. 281. Vid de allmänna underrätterna slutligt handlagda mål åren 1941—1950

Courts of First Instance: cases

Lagsökningsmål samt till annan domstol förvista brottmål ej medtagna i tabellen.

År *Year*	Civila mål[1] *Suits*					Kriminella mål *Criminal cases*				
	Avskrivna[2] *Removed from the case-list*		Avdömda *Dealt with*		Summa *Total*	Avskrivna *Removed from the case-list*		Avdömda *Dealt with*		Summa *Total*
	Hr[3]	Rr[3]	Hr	Rr		Hr	Rr	Hr	Rr	
1941	8 915	9 212	9 894	14 204	42 225	3 008	1 712	60 576	69 732	135 028
1942	6 861	7 267	9 544	13 382	37 054	2 992	1 801	68 731	76 592	150 116
1943	6 224	6 888	9 190	14 032	36 334	3 230	1 945	75 425	90 223	170 823
1944	6 027	6 966	9 826	15 150	37 969	3 129	2 076	74 132	82 405	161 742
1945	6 629	7 430	10 797	16 457	41 313	2 649	2 349	71 542	79 812	156 352
1946	6 271	7 029	10 509	16 910	40 719	2 529	2 464	69 630	73 909	148 532
1947	6 505	7 542	11 077	17 187	42 311	2 343	2 602	66 559	74 666	146 170
1948	4 162	3 754	10 449	13 901	32 266	837	957	26 432	27 685	55 911
1949	3 465	3 787	9 396	15 040	31 688	707	1 238	28 449	37 972	68 366
1950*	3 831	3 950	10 074	14 779	32 634	811	1 500	32 284	40 514	75 109

År *Year*	Samtliga mål *Total cases*			På 10 000 invånare *Per 10 000 inhabitants*					
				Civila mål *Suits*			Kriminella mål *Criminal cases*		
	Hr	Rr	Summa *Total*	Hr	Rr	Tillsammans *Total*	Hr	Rr	Tillsammans *Total*
1941	82 393	94 860	177 253	44·1	110·0	66·1	149·2	335·6	211·3
1942	88 128	99 042	187 170	38·4	95·4	57·6	168·0	362·3	233·4
1943	94 069	113 088	207 157	36·0	94·5	56·0	183·9	416·4	263·2
1944	93 114	106 597	199 711	36·8	98·1	57·9	179·2	374·7	246·4
1945	91 617	106 047	197 664	40·3	103·1	62·3	171·8	354·7	235·6
1946	88 939	100 312	189 251	38·7	100·5	60·6	166·4	320·7	221·1
1947	86 484	101 997	188 481	40·3	101·3	62·2	158·0	316·4	214·9
1948	41 880	46 297	88 177	33·0	71·7	46·9	61·7	116·4	81·2
1949	42 017	58 037	100 054	29·0	74·7	45·6	65·7	155·7	98·3
1950*	47 000	60 743	107 743	31·1	73·5	46·5	74·0	165·0	107·0

[1] Samtliga mål i vilka talan om ansvar ej förts. — [2] T. o. m. 1947 ingår även mål däri förlikning av rätten stadfästs. — [3] Hr = häradsrätterna *Rural Districts' Courts*, Rr = rådhusrätterna *City Courts*.

Tab. 282. Vid häradsrätter och rådhusrätter avdömda civila mål, efter tvisteföremålets beskaffenhet, åren 1941—1947

Courts of First Instance: civil-law cases

Lagsökningsmål ej medtagna i tabellen.

Mål *Cases*	1941/45		1945		1946		1947	
	Hr[1]	Rr[1]	Hr	Rr	Hr	Rr	Hr	Rr
Hemskillnad	1 994	4 107	2 526	5 149	2 599	5 229	2 598	5 188
Äktenskapsskillnad	1 529	3 375	1 939	4 560	2 096	4 947	2 188	4 877
Boskillnad	214	369	143	387	100	359	114	359
Underhåll av barn utom äktenskap	676	516	690	517	706	551	628	551
Familjerättsmål	195	452	257	595	294	633	279	600
Avlidens kvarlåtenskap	94	56	95	53	89	58	67	45
Expropriation	290	64	460	70	172	43	118	46
Arrende	99	7	89	5	97	7	94	8
Hyra	186	453	185	377	155	407	197	409
Fast egendom i övrigt	289	82	263	67	273	100	260	102
Köp av lös egendom[2]	2 312	1 545	2 301	1 543	2 251	1 517	2 807	1 609
Lös egendom i övrigt	443	541	463	522	391	469	394	535
Växel- och checkmål	392	1 520	368	1 243	364	1 352	408	1 533
Försträckning och borgen	225	334	205	276	170	244	152	239
Tjänsteavtal, sysslomannaskap o.d.	557	863	529	779	467	723	431	763
Sjörättsmål	0	28	—	27	3	12	—	11
Försäkringsavtal[3] o. pension	23	22	24	21	18	16	29	12
Utomobligatorisk skada[4]	142	127	112	127	102	122	159	143
Bolags- el. föreningstvister	44	53	42	50	32	34	35	32
Konkurstvister	112	97	85	70	108	68	88	97
Civila mål i övrigt	34	34	21	19	22	19	31	28
Summa	**9 850**	**14 645**	**10 797**	**16 457**	**10 509**	**16 910**	**11 077**	**17 187**

[1] Se not [3] sid. 243. *See note [3] page 243.* — [2] Jämte immateriella förmögenhetsrätter. — [3] Utom sjöförsäkring. — [4] Utom i fråga om fast egendom och immateriella förmögenhetsrätter.

Tab. 283. Vid häradsrätter och rådhusrätter slutligt handlagda ärenden m. m. åren 1941/45 samt 1948—1950

Courts of First Instance: entries, etc.

Ärenden *Entries*	1941/45		1948		1949*		1950*	
	Hr[1]	Rr[1]	Hr	Rr	Hr	Rr	Hr	Rr
Lagfart	93 291	16 965	103 050	15 431	95 198	14 428	98 595	14 580
Inteckn., tomtr. o. vattenfallsr.	146 321	66 672	197 221	79 662	208 979	72 591	229 292	75 053
Övriga inskrivningsärenden	17 021	3 080	29 969	5 069	26 550	4 146	24 006	4 742
Förmynderskap el. godmanskap	25 000	9 074	26 354	9 288	24 182	8 658	22 830	8 609
Äktenskapsförord	1 377	2 517	1 447	3 130	1 488	2 650	1 560	2 741
Inregistrering av bouppteckn.	44 823	19 855	46 415	20 231	45 825	22 100	46 127	22 462
Testamentsbevakning	2 875	1 799	2 695	1 826	2 762	1 914	2 866	2 001
Lösöreköp	218	[2] 145	263	220	352	293	370	267
Dödförklaring	329	71	293	43	196	33	203	26
Omyndighets- el. myndighetsförklaring	1 156	615	2 353	914	2 022	831	1 775	724
Antagande av adoptivbarn	1 101	889	1 998	1 215	1 732	1 170	1 711	1 155
Sjöförklaring	7	226	16	260	5	217	9	215
Konkursärenden och ackordsförhandlingar utan konkurs	1 270	3 080	1 311	2 487	1 605	2 122	1 839	3 979
Övriga ärenden	16 565	10 180	13 975	9 449	13 057	10 422	13 187	10 483
Summa ärenden *Total*	**351 354**	**135 168**	**427 360**	**149 225**	**423 953**	**141 575**	**444 370**	**147 037**
På 10 000 inv. *Per 10 000 inh.*	819·8	610·1	966·4	606·3	955·5	562·1	994·2	577·3
Bötesförvandling	331	1 123	455	1 102	341	1 916	368	1 470
Äganderättsbevis	..	..	3 511	1 459	3 896	1 416	3 416	1 430
Gravationsbevis	112 824	40 969	144 330	43 828	141 223	41 971	155 570	46 395

[1] Se not [3] sid. 243. *See note [3] page 243.* — [2] Åren 1941—45 handlades ärenden ang. lösöreköp i Stockholms stad å överståthållarämbetets kansli och ingår således ej här.

Tab. 284. Hovrätternas verksamhet åren 1948—1950

Courts of Appeal

Siffror för vattenöverdomstolen ingår jämväl i tabellen.

År *Year*	Inkomna mål *Cases brought before the Court*						Slutligt handlagda mål *Cases*		Till följande år balanserade mål *Cases carried over*	Slutligt handlagda ärenden *Other affairs dealt with*	Revisions- och besvärsinlagor *Bills of review to the Supreme Court*	
	Vädjade tvistemål *Appeal suits*		Vädjade[1] brottmål *Appeals in criminal cases*		Besvärsmål[3] *Other appeal cases*	Mål hos hovrätt som första instans *In 1st instance*	avskrivna *removed from the case-list*	andra *others*			Mottagna *Accepted*	Avvisade *Dismissed*
	Antal *Number*	% [2]	Antal *Number*	% [2]								
1948	1 562	6·4	1 903	3·5	1 009	7	399	5 504	1 286	241	325	—
1949*	1 575	6·4	2 046	3·1	1 204	3	931	3 865	1 309	49	902	21
1950*	1 702	6·9	2 247	3·1	1 247	3	468	4 680	1 356	28	900	20

[1] Inkl. kriminella besvärsmål enl. gamla rättegångsbalken. — [2] % av i första instans avdömda motsvarande mål. — [3] Utom kriminella besvärsmål enl. gamla rättegångsbalken.

Tab. 285. Högsta domstolens verksamhet åren 1948—1950

The Supreme Court of Judicature

På grund av övergången till den nya processordningen har full jämförbarhet mellan redogörelseåren icke kunnat åstadkommas i denna tabell.

År *Year*	Till nedre justitierevisionen inkomna *Cases brought before the Court*										Mål och ärenden *Cases and affairs*		Till följande år balanserade mål och ärenden *Cases carried over to the following year*
	mål i 3:e instans *cases in the 3rd instance*					mål i *cases in the*		ansökningar om *petitions for*					
	Tvistemål *Suits*	Brottmål *Criminal cases*	Övriga mål *Others*	Summa *Total*		2:dra instans *2nd instance*	1:a instans *1st instance*	resning *review*	återställ. av försutten tid *a new period within which protest may be lodged*	nåd *mercy*	andra ärenden *other cases*	avgjorda *dealt with*	avskrivna *removed from the case-list*	
	i vilka ansökts om prövningstillstånd[1]			antal *number*	% [2]									
1948	474	347	8	829	15·1	36	—	69	7	1 063	[3] 823	2 831	28	628
1949*	558	437	66	1 061	27·5	41	—	54	7	1 021	[4] 58	2 249	31	534
1950*	532	435	19	986	21·1	39	1	74	10	1 238	[5] 41	2 280	29	491

[1] Inkl. inkomna mål enl. gamla rättegångsbalken. — [2] % av i hovrätt avdömda motsvarande mål. — [3] Därav 820 dispensansökn. enl. gamla rättegångsbalken. — [4] Därav 48 d:o. — [5] Därav 25 d:o.

Tab. 286. Slutligt handlagda mål om lagsökning, betalningsföreläggande och utsökning åren 1948—1950 *Cases of debt-recovery, injunctions to pay, etc.*

År *Year*	Av allmän underrätt slutligt handlagda mål angående *Cases finally dealt with by Courts of First instance*							Av överexekutor slutligt handlagda utsökningsmål *Cases of debt-recovery, finally dealt with by chief executory officer*
	lagsökning för *debt-recovery cases*				betalningsföreläggande *injunction to pay*			
	i fastighet eller fartyg intecknad fordran		annan fordran			Därav mål i vilka		
	Hela antalet *Total*	Därav bifallna *Thereof sanctioned*	Hela antalet *Total*	Därav bifallna *Thereof sanctioned*	Hela antalet *Total*	föreläggande utfärdats enl. lagsökn.lagen 23 §	ansökn. lämnats obestridd el. allenast kostnad el. del därav bestritts	
1948	1 447	877	15 682	9 888	44 862	30	32 090	8 266
1949	1 439	979	15 638	11 955	51 092	50	39 081	10 214
1950*	1 820	1 181	18 210	12 985	56 550	51	40 618	10 494

Tab. 287. Ägodelningsrätternas och vattendomstolarnas verksamhet åren 1941—1950 *Courts for division of land and Water courts*

	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Ägodelningsrätter och ägodelningsdomare *Courts for division of land*										
Stämningsmål och besvärsmål										
Avskrivna	10	12	23	29	24	35	21	..	..	..
Avdömda	223	208	245	259	284	263	279	..	..	..
Andra mål och ärenden slutligt avgjorda	11 565	11 861	13 366	14 948	16 512	17 755	17 213	..	..	..
Vattendomstolar [1] *Water courts*										
Avskrivna mål	21	37	30	30	36	24	22	32	*34	*48
Avdömda mål	404	326	385	383	460	626	557	510	*477	*590

[1] Till annan domstol förvista mål ej inräknade.

Tab. 288. Lagfarna köp av fast egendom: saluvärde i 1 000 kronor, åren 1941—1949 *Purchase of real estate: sales value*

Köp, varå lagfart sökts.

År *Year*	Frivillig försäljning *Voluntary sale*		Utmätn. el. konkurs *Distraint or bankruptcy*		Egendom köpt av *Real estate, bought by*			
	Landsbygd [1] *Rural*	Städer [1] *Urban*	Landsbygd [1] *Rural*	Städer [1] *Urban*	jur. pers. från ensk.[2] *jur. pers. fr. nat. p.*	ensk.[2] från jur. pers. *nat. p. fr. jur. pers.*	utl. från svenskar *foreigners fr. Swedes*	svenskar från utl. *Swedes fr. foreigners*
1941	434 696	358 424	11 225	24 963	98 302	47 878	394	80
1942	522 818	526 359	9 926	12 850	117 852	72 968	819	56
1943	591 886	549 757	5 484	5 716	113 193	90 545	1 109	205
1944	650 141	592 066	2 665	3 442	126 185	101 501	815	13
1945	885 690	763 615	3 955	3 533	167 715	127 816	407	65
1946	1 131 314	935 627	4 051	2 781	199 630	138 154	563	274
1947	1 130 297	912 047	4 445	2 290	210 925	189 601	[3] 2 862	2 207
1948	1 033 933	662 097	6 874	5 453	176 640	127 233	1 773	74
1949	927 777	790 635	7 130	3 464	169 687	124 356	359	953

[1] Städer under landsrätt räknade till landsbygden. — [2] Fysiska personer och dödsbon. — [3] Därav 27 569 kr. för egend. köpt av utlänningar från utlänningar.

Tab. 289. Lagfarter, tomträtt och inteckningar åren 1940—1949

Legal ratifications, site leaseholdership rights and mortgages

År *Year*	Antal lagfarter på grund av *Number of legal ratifications based on*				I fast egendom intecknad gäld den 31 december *Debt mortgaged in real estate*		Antal tomträtter *Number of site leaseholdership rights*		
	köp *bargains*	arv el. giftorätt *inheritance or marriage*	annat fång *other legal acquirement*	Summa *Total*	Belopp 1 000 kr *Amount*	% [1]	Nya *New*	Överlåtna *Transferred*	Upphörda *Discontinued*
1940	52 549	21 114	4 189	**77 852**	14 513 174	59·4	244	726	9
1941	58 845	25 347	4 909	**89 101**	14 832 479	59·2	179	912	17
1942	68 517	24 529	4 938	**97 984**	15 393 939	60·1	690	987	8
1943	74 361	25 199	4 632	**104 192**	16 116 426	61·2	719	965	61
1944	78 100	23 600	4 228	**105 928**	17 106 243	54·7	782	1 001	28
1945	93 462	25 943	4 994	**124 399**	18 420 803	57·2	1 171	1 197	37
1946	102 121	24 782	5 596	**132 499**	19 990 271	59·7	949	1 332	11
1947	96 097	25 341	6 763	**128 201**	21 610 500	61·9	1 068	1 207	15
1948	81 463	23 383	5 943	**110 789**	23 066 438	63·8	922	1 038	11
1949	73 848	22 070	5 829	**101 747**	24 416 316	65·3	870	1 015	11

År *Year*	Inteckningar i tomträtt *Mortgages in site leaseholdership rights*				Inteckningar i fast egendom *Mortgages in real estate*				Inteckningar i järnväg *Mortgages in railways*			
	Beviljade *Granted*		Dödade *Cancelled*		Beviljade		Dödade		Beviljade		Dödade	
	Antal	Belopp 1 000 kr	Antal	Belopp 1 000 kr	Antal	Belopp 1 000 kr	Antal	Belopp 1 000 kr	Antal	Belopp 1 000 kr	Antal	Belopp 1 000 kr
1940	1 696	25 826	61	293	60 595	406 819	10 654	113 246	7	740	147	18 264
1941	1 147	12 475	63	1 285	55 139	415 797	11 550	96 492	16	5 600	28	6 610
1942	2 920	60 442	66	472	72 108	678 731	12 068	117 271	6	1 411	18	6 009
1943	4 062	95 991	616	20 433	80 073	843 502	14 562	121 015	—	—	102	15 399
1944	3 452	108 258	100	3 460	92 799	1 144 764	14 518	154 946	9	4 150	183	26 845
1945	4 462	147 659	198	8 073	123 912	1 438 612	17 498	124 053	21	1 250	42	9 005
1946	6 001	184 782	157	6 285	145 025	1 715 646	19 197	146 178	4	2 000	84	33 167
1947	5 088	180 541	95	3 793	138 417	1 808 947	19 362	188 719	17	965	108	9 804
1948	5 015	192 655	130	4 218	109 984	1 655 677	18 094	199 738	1	250	92	53 996
1949	4 366	207 797	108	5 059	109 770	1 517 595	16 225	167 717	9	450	20	14 082

År *Year*	Förlagsinteckningar *Mortgages in commandite companies, etc.*				Inteckningar i jordbruksinventarier *Mortgages in agricultural implements*				Inteckningar i fartyg *Mortgages in ships*			
	Beviljade		Dödade		Beviljade		Dödade		Beviljade		Dödade	
	Antal	Belopp 1 000 kr	Antal	Belopp 1 000 kr	Antal	Belopp 1 000 kr	Antal	Belopp 1 000 kr	Antal	Belopp 1 000 kr	Antal	Belopp 1 000 kr
1940	1 388	62 058	351	19 836	271	2 116	39	199	329	20 135	104	8 930
1941	1 352	61 067	421	25 228	325	1 994	63	464	219	19 905	43	6 576
1942	1 457	76 089	339	18 273	375	2 124	45	235	350	34 236	90	12 324
1943	1 894	97 271	603	38 054	210	2 016	92	715	228	13 499	112	15 532
1944	1 401	80 729	383	24 844	269	3 110	85	494	365	43 910	71	5 119
1945	1 931	75 641	549	34 339	297	3 657	69	538	226	17 071	108	6 026
1946	2 645	102 323	582	21 061	342	4 448	64	649	288	23 203	221	20 877
1947	3 749	245 836	923	66 325	312	4 638	64	513	682	74 889	86	6 289
1948	3 741	268 509	1 149	71 212	253	3 473	70	478	506	57 674	153	12 286
1949	3 202	180 785	743	44 639	502	5 317	66	745	468	59 386	231	21 844

[1] Av taxeringsvärdet för skattepliktig fast egendom. *Of assessed value of real estate liable to estate duty.*

Tab. 290. I första instans till ansvar fällda förbrytare, fördelade efter förbrytelsens art m. m., åren 1945—1949 *Persons convicted in the Courts of First Instance by kind of offences*

I tabellen har medtagits personer som fått strafföreläggande enl. 48 kap. nya rättegångsbalken, som började tillämpas år 1948. I specialredovisningen för Stockholm, Göteborg och Malmö har icke medräknats brott av krigsmän. Förbrytelserna har angivits med beteckningar och lagrum enl. den år 1950 gällande strafflagstiftningen. Där någon i ett och samma fall blivit förvunnen till brott av mer än ett slag, har han räknats endast vid det svåraste brottet.

Förbrytelser m. m. *Offences, etc.*	Antal förbrytare *Number of offenders*				
	1945	1946	1947	1948	1949
Strafflagsbrott *Offences against the civil penal code*	**59 180**	**50 555**	**49 928**	**45 642**	**51 810**
8, 9 kap. Brott mot rikets säkerhet och högmålsbrott *Treason and other off. against the security of the State*	40	18	2	4	6
10 kap. Brott mot allmän verksamhet *Offences against public activities*	2 829	2 396	2 472	1 556	2 294
Därav: våld el. hot mot tjänsteman o. dyl.	1 260	1 129	1 181	607	889
våldsamt motstånd	1 493	1 196	1 213	893	1 311
11 kap. Brott mot allmän ordning *Breach of the peace*	36 246	31 396	31 420	30 873	34 959
Därav: fylleri	31 686	27 445	27 106	27 813	31 195
förargelseväckande beteende	4 321	3 781	4 174	2 957	3 595
12 kap. Förfalskningsbrott *Forgery*	264	313	245	188	221
13 kap. Mened, falskt åtal m. m. *Perjury, false charge, etc.*	90	92	58	47	77
14 kap. Mord, dråp och annan misshandel *Murder, etc.*	3 926	3 494	3 247	2 711	3 257
Därav: mord och dråp	12	8	11	14	12
vållande till annans död	86	128	171	130	157
barnamord o. dyl.	4	8	9	6	4
fosterfördrivning	412	422	178	126	91
15 kap. Brott mot annans frihet eller frid *Violation of personal safety, etc.*	321	204	251	195	209
Därav: våldtäkt	25	12	21	12	29
16 kap. Ärekränkning *Defamation*	109	103	80	52	61
17 kap. Brott mot familj *Offences against family*	2	2	—	2	2
18 kap. Sedlighetsbrott *Sexual offences*	442	475	387	291	421
Därav: sedlighetssårande handling	244	291	234	171	228
19 kap. Allmänfarliga brott *Offences, dang. to the public*	510	536	605	438	412
Därav: mordbrand	10	15	22	13	5
20 kap. Stöld, rån m. m. *Larceny, robbery, etc.*	5 704	5 160	5 319	4 505	5 549
Därav: grov stöld	1 643	1 392	1 565	1 706	2 069
rån	34	12	36	34	36
egenmäktigt förfarande	1 024	1 300	1 284	874	1 285
21 kap. Bedrägeri m. m. *Fraud, etc.*	2 634	2 340	2 199	1 697	1 985
22 » Förskingring m. m. *Embezzlement, etc.*	1 059	1 073	1 016	794	995
23 » Gäldenärsbrott *Offences in bankruptcy*	43	54	82	88	111
24 » Skadegörelse m. m. *Malicious inj. to property, etc.*	236	156	174	148	267
25 » Ämbetsbrott *Offences by officials*	79	137	135	84	138
26 » Brott av krigsmän *Off. against military discipline*	4 646	2 606	2 236	1 969	846
I strafflagen ej upptagna brott *Off. against other statutes*	**107 114**	**108 694**	**104 608**	**77 236**	**110 925**
Mot författningar ang. rusdrycker o. pilsnerdricka *Against laws and regulations concerning intoxicants*	3 746	4 109	3 147	3 273	3 218
Därav: lönnbränning	335	213	182	123	125
Rattfylleri *Driving while intoxicated*	580	1 695	1 981	1 609	1 911
Mot jaktlagstiftning *Laws and regulations respecting hunting*	2 148	2 070	1 587	1 644	1 656
Mot fiskelagstiftning *Statutes concern. fishing*	654	632	639	533	773
Mot skattelagstiftn. *Laws and regul. concern. duties*	5 666	5 794	4 056	2 334	4 273
Därav: skattestrafflagen	1 369	3 227	1 975	311	1 343
Övriga brott *Other offences*	94 320	94 394	93 198	67 843	99 094
Samtliga *Total*	**166 294**	**159 249**	**154 536**	**122 878**	**162 735**
Därav: män *males*	145 011	141 768	140 236	112 807	146 728
kvinnor *females*	21 283	17 481	14 300	10 071	16 007
Stockholm	24 330	23 108	22 768	7 160	22 348
Göteborg	11 552	12 243	11 936	10 236	15 843
Malmö	6 140	5 264	5 738	6 129	5 691

Tab. 291. I första instans till ansvar fällda förbrytare, fördelade efter påföljdens art, åren 1945—1949 *Persons convicted in the Courts of First Instance by type of sentence*

Påföljder *Sentences*	Antal förbrytare *Number of offenders*					På 100 000 av den straffmyndiga medelfolkmängden *Per 100 000 of mean population (over 15 years)*				
	1945	1946	1947	1948	1949	1945	1946	1947	1948	1949
Män *Males*										
Ovillkorligt straffarbete *Imprisonment at labour*	2 422	1 959	2 052	1 832	2 100	94·2	75·5	78·5	69·6	79·3
Ovillkorligt fängelse *Simple imprisonment*	1 891	2 112	2 066	1 738	1 931	73·5	81·4	79·0	66·0	73·0
Ovillkorligt bötesstraff[1] *Fine only*	133 609	132 042	130 784	104 364	138 071	5 194·0	5 089·1	5 002·0	3 964·9	5 216·3
Därav genom strafföreläggande[2]	·	·	·	56 415	80 937	·	·	·	2 143·3	3 057·8
Disciplinstraff (arrest)[3] *Disciplinary punishment*	3 398	1 936	1 706	1 519	774	132·1	74·6	65·2	57·7	29·2
Ungdomsfängelse *Youth prison*	206	178	188	174	157	8·0	6·9	7·2	6·6	5·9
Tvångsuppfostran *Correctional school*	48	34	13	1	·	2·9	1·3	0·5	0·0	—
Förvaring *Detention*	95	117	156	160	211	3·7	4·5	6·0	6·1	8·0
Internering *Internment*	2	6	3	4	2	0·1	0·2	0·1	0·2	0·1
Villkorligt anstånd med: straffs verkställande *Imposition of the sentence suspended*	2 795	2 694	2 601	2 226	2 555	108·7	103·8	99·5	84·6	96·5
straffs ådömande *Execution of the sentence suspended*	537	684	663	788	920	20·9	26·4	25·4	29·9	34·8
Endast avsättning eller suspension *Only removal or suspension*	8	6	5	1	7	0·3	0·2	0·2	0·0	0·3
Kvinnor *Females*										
Ovillkorligt straffarbete	100	77	53	48	64	3·8	2·9	2·0	1·8	2·4
» fängelse	39	36	16	20	18	1·5	1·4	0·6	0·7	0·7
» bötesstraff	20 292	16 544	13 643	9 517	15 435	769·8	622·6	509·6	353·4	570·0
Därav genom strafföreläggande	·	·	·	5 061	9 143	·	·	·	187·9	337·6
Disciplinstraff (arrest)	—	—	—	—	—	—	—	—	—	—
Ungdomsfängelse	30	16	21	7	7	1·1	0·6	0·8	0·3	0·3
Tvångsuppfostran	3	2	2	—	—	0·1	0·1	0·1	—	—
Förvaring	2	1	1	2	—	0·1	0·0	0·0	0·1	—
Internering	—	—	—	—	—	—	—	—	—	—
Villkorl. anstånd m. straffs verkställande	708	692	470	369	366	26·9	26·0	17·6	13·7	13·5
ådömande	109	112	94	108	116	4·1	4·2	3·5	4·0	4·3
Endast avsättning eller suspension	—	1	—	—	1	—	0·0	—	—	—
Män och kvinnor *Males and females*										
Åtalseftergift[4] *Remission of prosecution*	2 836	2 603	2 534	2 142	2 782	54·5	49·6	47·9	40·2	52·0

[1] Dömda till endast böter. — [2] Enl. nya rättegångsbalken 48 kap. — [3] Enl. strafflagen för krigsmakten. — [4] Eftergift av åtal för brott som begåtts av personer ej fyllda 18 år.

Tab. 292. Brott som kommit till polisens kännedom åren 1950 och 1951 *Offences known to the police*

Brott *Offences*	1950	1951 Hela riket	Stockholm	Göteborg	Malmö
Strafflagsbrott *Offences against the penal code*					
10 kap. Brott mot allmän verksamhet *Offences against public activities*	3 520	3 458	1 158	259	67
Därav: våld eller hot mot tjänsteman o. dyl. *violence or threats against officials*	708	729	267	99	18
våldsamt motstånd *forcible resistance*	1 849	1 803	456	146	36
11 kap. Brott mot allmän ordning (utom fylleri och och förargelseväckande beteende) *Breach of the peace (except drunkenness and disorderly behaviour)*	530	583	130	1	4
12 kap. Förfalskningsbrott *Forgery*	1 654	1 199	222	51	37
13 kap. Mened, falskt åtal och annan osann utsaga *Perjury, false charge and other false statements*	389	593	72	47	23
14 kap. Mord, dråp och annan misshandel *Murder, manslaughter, assault and battery and similar offences*	8 441	8 809	1 696	1 209	529
Därav: mord och dråp *murder and manslaughter*	53	60	4	1	—
vållande till en annans död *homicide by misadventure, etc.*	295	286	36	1	7
barnamord o. dyl. *infanticide*	28	28	—	—	2
fosterfördrivning *procuring abortion*	237	295	27	8	2
15 kap. Brott mot annans frihet eller frid *Violation of personal safety, etc.*	1 745	2 191	433	245	110
Därav: våldtäkt *rape*	350	449	64	23	1
18 kap. Sedlighetsbrott *Sexual offences*	2 479	2 756	436	275	142
Därav: otukt med person under 15 år *indecent assaults on persons under 15 years of age*	796	929	132	35	9
annan otukt *other indecent assaults*	262	418	90	52	1
exhibitionism *indecent exposure*	642	522	98	18	35
annan sedlighetssårande handling *other indecent actions*	706	786	69	162	96
19 kap. Allmänfarliga brott *Offences dangerous to the public*	2 118	2 299	357	19	42
Därav: mordbrand *arson*	216	244	29	4	2
20 kap. Stöld, rån, egenmäktigt förfarande *Larceny, robbery, unauthorized taking of goods, etc.*	110 660	134 324	30 481	13 903	8 191
Därav: inbrottsstöld *housebreaking and burglary*	20 714	24 159	6 958	3 339	1 866
tillgrepp av bilar och motorcyklar *thefts of motorcars and motorcycles*	7 065	9 228	3 581	1 226	609
rån *robbery*	190	214	70	29	9
21 kap. Bedrägeri och dylik oredlighet, utpressning, ocker och häleri *Fraud and other similar dishonesty, extortion, usury and keeping stolen goods*	14 653	21 907	5 914	5 901	740
22 kap. Förskingring och annan trolöshet *Embezzlement, etc.*	5 469	5 754	1 509	556	319
23 kap. Gäldenärsbrott *Offences in bankruptcy*	292	327	42	14	2
24 kap. Skadegörelse, tagande av olovlig väg *Malicious injuries to property, trespass*	5 063	5 165	736	340	252
25 kap. Ämbetsbrott *Offences by officials*	806	854	41	7	7
Övriga strafflagsbrott (utom fylleri och förargelseväckande beteende) *Other offences against the penal code (except drunkenness and disorderly behaviour)*	3 959	4 534	897	382	19
Summa *Total*	**161 778**	**194 753**	**44 124**	**23 209**	**10 484**
I strafflagen ej upptagna brott, varpå urbota straff kan följa *Offences against other statutes where imprisonment may be imposed*					
Lönnbränning *Unlicensed distillery*	410	400	15	4	—
Rattfylleri *Driving while intoxicated*	3 460	4 658	620	331	102
Övriga brott *Other offences*	29 613	32 441	1 193	601	154
Summa *Total*	**33 483**	**37 499**	**1 828**	**936**	**256**

Tab. 293. För förbrytelser sakfällda i första instans, om vilka uppgift lämnats till straffregistret, fördelade efter ålder m. m., åren 1940—1949

Persons convicted in the Courts of First Instance, by age, etc

Tabellen omfattar personer, dömda till urbota straff, villkorlig dom m. fl.

År *Year*	Ålder, år *Age, year* 15/18 Antal *Number*	15/18 På 100 000 inv. *inhab.*	18/21 Antal *Number*	18/21 På 100 000 inv. *inhab.*	21/25 Antal *Number*	21/25 På 100 000 inv. *inhab.*	25/30 Antal *Number*	25/30 På 100 000 inv. *inhab.*	30/40 Antal *Number*	30/40 På 100 000 inv. *inhab.*	40–[1] Antal *Number*	Förut ej straffade[2] *Not convicted earlier*	Förut straffade[2] *Convicted earlier* 1 gång *Once*	2 gånger *Twice*	3 el. fl. ggr. *Three times or more*	Summa sakfällda *Total*
1940	1 178	392·4	1 169	340·9	1 281	308·6	1 254	230·1	1 531	146·8	1 024	5 353	1 071	420	593	**7 437**
1941	1 837	632·4	1 587	492·4	1 788	413·1	1 414	262·4	1 772	168·2	1 226	6 880	1 467	526	751	**9 624**
1942	2 256	804·4	2 067	673·0	2 617	592·7	1 822	342·7	2 225	209·3	1 558	9 045	1 844	711	945	**12 545**
1943	1 713	627·0	1 946	649·7	2 559	576·8	1 822	347·5	2 299	214·3	1 627	8 131	1 952	771	1 112	**11 966**
1944[3]	1 116	419·3	1 771	610·1	2 463	554·0	1 803	348·2	2 224	205·8	1 495	7 267	1 816	730	1 059	**10 872**
1945	634	241·7	1 483	530·2	2 047	488·7	1 748	329·0	2 145	196·5	1 467	6 049	1 639	684	1 152	**9 524**
1946	601	232·1	1 314	478·3	1 770	433·9	1 748	318·3	2 266	208·6	1 537	5 921	1 533	728	1 054	**9 236**
1947	496	193·0	1 376	511·9	1 680	420·8	1 590	287·5	2 175	200·1	1 587	5 376	1 567	763	1 198	**8 904**
1948	441	175·9	1 231	461·1	1 457	374·9	1 474	264·7	1 867	172·4	1 338	4 477	1 434	665	1 232	**7 808**
1949	443	180·0	1 415	540·0	1 642	432·0	1 659	298·0	2 066	192·5	1 596	4 893	1 623	798	1 507	**8 821**

[1] Inr. ett fåtal av okänd ålder. — [2] Avser endast påföljder, om vilka uppgift skolat lämnas till straffregistret. — [3] Ny lag år 1944 om åtalseftergift mot vissa minderåriga.

Tab. 294. I fångvårdsanstalterna intagna och därifrån avgångna personer åren 1947—1951. *Persons received into prisons and released*

	1947	1948	1949	1950	1951 Män *Males*	1951 Kvinnor *Females*	1951 Summa *Total*
Kvarvarande 1 januari *Remaining*	**2 067**	**2 064**	**2 265**	**2 417**	**2 340**	**61**	**2 401**
Intagna under året *Received during the year*	**5 586**	**5 488**	**5 563**	**5 313**	**6 060**	**140**	**6 200**
Avgångna under året *Released during the year*							
Frigivna efter *Discharged from*							
häktning *custody*	636	458	590	520	623	26	649
utståndet straffarbete *imprisonment at labour*	730	732	563	615	612	15	627
utståndet fängelse *simple imprisonment*	2 220	1 999	2 102	1 984	2 352	13	2 365
Villkorligt frigivna från *Paroled from*							
straffarbete (fak.) *imprisonment at labour (fac.)*	163	137	151	165	174	11	185
straffarbete (obl.) *imprisonment at labour (obl.)*	827	849	996	1 180	1 216	19	1 235
fängelse (fakultativ) *simple imprisonment (fac.)*	2	1	1	2	1	—	1
fängelse (obl.) *simple imprisonment (obl.)*	22	19	30	31	35	2	37
Utskrivna på prov från *Paroled from*							
förvaring *preventive detention*	84	113	128	174	180	1	181
internering *internment*	6	3	6	—	7	—	7
ungdomsfängelse *youth prison*	195	205	171	162	158	5	163
Övriga[1] *Others*	704	771	673	496	375	50	425
Summa avgångna *Total*	**5 589**	**5 287**	**5 411**	**5 329**	**5 733**	**142**	**5 875**
Kvarvarande 31 december *Remaining*	**2 064**	**2 265**	**2 417**	**2 401**	**2 667**	**59**	**2 726**

[1] I förvar tagna utlänningar m. fl.

Tab. 295. Fångvårdsanstalterna: intagningar åren 1947—1951 och beläggningen den 31 dec. åren 1947 och 1951 *Prisons: receptions and number of inmates*

Antalet intagningar är högre än antalet i fångvårdens anstalter intagna personer, enär en intagen under anstaltstiden kan tillhöra mer än en av de i tabellen redovisade kategorierna.

Kategorier *Category*	Intagningar under året *Receptions during the year*						Kvarvarande den 31 dec. *Remaining 31 st December*			
					1951			1951		
	1947	1948	1949	1950	Hela antalet[1]	Därav kv.[2]	1947	Hela antalet	Därav kvinnor	På öppna anstalter[3]
Häktade *Detained*										
för brott *because of crime*	1 964	1 771	2 028	2 059	2 422	72	78	136	4	.
för lösdriveri *because of vagrancy*	42	79	97	51	10	4	1	—	—	.
undersökningsfall *under forensic psychiatric examination*	514	540	491	519	519	14	124	134	2	.
Dömda till *Sentenced to*										
straffarbete *imprisonment at labour*	1 799	1 825	1 918	1 976	2 201	46	1 070	1 401	33	192
fängelse *simple imprisonment*	1 898	1 799	1 897	1 632	2 300	15	194	333	4	227
förvandlingsfängelse *imprisonment (conversion of unpaid fines)*	355	277	275	391	276	3	20	32	—	4
förvaring *preventive detention*	130	160	175	176	214	1	267	427	2	84
internering *internment*	6	4	3	1	1	1	20	4	—	—
tvångsarbete *compulsory work*	24	54	69	38	8	4	3	1	1	.
ungdomsfängelse *youth prison*	195	178	163	153	162	7	222	202	9	95
Straffriförklarade *Declared insane*	138	108	135	116	108	8	31	43	1	.
Övriga[4] *Others*	373	530	376	261	225	18	34	13	3	.

[1] *Total number.* — [2] *Thereof females.* — [3] *In open sections.* — [4] I förvar tagna utlänningar m. fl.

Tab. 296. Fångvårdsanstalterna: nykomna, fördelade efter ålder m. m., åren 1947—1951 *Persons received into prisons: age distribution*

Tab. avser bl. a. ej personer, som återintagits efter utskrivn. på prov från förvaring, internering och ungdomsfängelse. *Not incl. persons reinterned after parole fr. prev. detention, internm. and youth prison.*

Ådömda påföljder *Sentences*	1947	1948	1949	1950	1951		
					Män *Males*	Kvinnor *Females*	Summa *Total*
15—17 år *years*							
straffarbete *imprisonment at labour*	3	8	10	8	—	—	—
fängelse *simple imprisonment*	3	8	9	14	14	—	14
förvaring *preventive detention*	—	—	—	—	—	—	—
Summa *Total*	6	16	19	22	14	—	14
18—20 år *years*							
straffarbete *imprisonment at labour*	86	59	89	110	109	—	109
fängelse *simple imprisonment*	68	46	29	41	69	1	70
förvaring *preventive detention*	—	—	1	1	—	—	—
internering *internment*	—	—	—	—	—	—	—
ungdomsfängelse *youth prison*	170	151	147	139	136	6	142
Summa *Total*	324	256	266	291	314	7	321
21—24 år *years*							
straffarbete *imprisonment at labour*	435	397	439	459	492	9	501
fängelse *simple imprisonment*	292	283	262	268	353	7	360
förvaring *preventive detention*	7	12	13	11	7	—	7
internering *internment*	—	—	—	—	—	—	—
ungdomsfängelse *youth prison*	7	6	3	2	4	1	5
Summa *Total*	741	698	717	740	856	17	873
25 år och däröver *25 years and over*							
straffarbete *imprisonment at labour*	1 271	1 350	1 370	1 387	1 540	37	1 577
fängelse *simple imprisonment*	1 533	1 464	1 598	1 308	1 847	7	1 854
förvaring *preventive detention*	90	88	90	87	97	1	98
internering *internment*	3	—	—	—	—	—	—
Summa *Total*	2 897	2 902	3 058	2 782	3 484	45	3 529

TDV İSAM
Kütüphanesi Arşivi
No 059-126/5

Tab. 297. Fångvårdsanstalterna: nykomna, fördelade efter strafftid m. m. åren 1947—1951 *Persons received into prisons: length of sentences*

Tab. avser för straffarbete och fängelse strafftid och för förvaring och internering minsta tid. Enär domstol ej fastställer minsta tid för ungdomsfängelse, ingår denna påföljd ej i tabellen. Se även anm. till tab. 296.

	1947	1948	1949	1950	1951		
					Män *Males*	Kvinnor *Females*	Summa *Total*
Dömda till straffarbete *Sentenced to imprisonment at labour*							
under 6 månader *under 6 months*	749	656	547	582	603	11	614
6 månader intill 1 år *6 months up to 1 year*	613	677	791	816	942	20	962
1 intill 2 år *years*	323	370	447	447	480	13	493
2 år och däröver (tidsbestämt) *2 years and over (determinate)*	108	110	122	115	115	2	117
livstid *life*	2	1	1	4	1	—	1
Summa *Total*	1 795	1 814	1 908	1 964	2 141	46	2 187
Dömda till fängelse *Sentenced to simple imprisonment*							
under 3 månader *under 3 months*	1 609	1 536	1 613	1 354	1 872	7	1 879
3 månader och däröver *3 months and over*	287	265	285	277	411	8	419
Summa *Total*	1 896	1 801	1 898	1 631	2 283	15	2 298
Dömda till förvaring *Sentenced to preventive detention*							
1 år *year*	23	24	39	33	45	1	46
över 1 t. o. m. 2 år *over 1 to 2 years*	57	59	51	54	48	—	48
över 2 år *over 2 years*	17	17	14	12	11	—	11
Summa *Total*	97	100	104	99	104	1	105
Dömda till internering *Sentenced to internment*							
5 år och däröver *5 years and over*	3	—	—	—	—	—	—

Tab. 298. Fångvårdsanstalterna: nykomna fördelade efter tidigare asocialitet åren 1947—1951 *Persons received into prisons: distribution according to previous sentences*

Se anm. till tab. 296.

	1947	1948	1949	1950	1951		
					Män *Males*	Kvinnor *Females*	Summa *Total*
Förut ostraffade, nu dömda till *Previously not sentenced, now sentenced to*							
straffarbete *imprisonment at labour*	406	347	382	370	343	9	352
fängelse *simple imprisonment*	1 253	1 188	1 253	1 069	1 495	9	1 504
förvaring *preventive detention*	3	4	1	2	2	—	2
ungdomsfängelse *youth prison*	71	50	66	49	47		50
Summa *Total*	1 733	1 589	1 702	1 490	1 887	21	1 908
Förut endast villkorlig dom, nu dömda till *Previously only probation, now sentenced to*							
straffarbete *imprisonment at labour*	326	362	366	383	418	12	430
fängelse *simple imprisonment*	141	151	148	132	173	3	176
förvaring *preventive detention*	2	2	5	—	—	—	—
ungdomsfängelse *youth prison*	101	100	81	84	85	4	89
Summa *Total*	570	615	600	599	676	19	695
Förut frihetsstraff, förvaring eller internering, nu dömda till *Previously imprisonment at labour, simple imprisonment, preventive detention, internment, youth prison, now sentenced to*							
straffarbete *imprisonment at labour*	1 063	1 105	1 160	1 211	1 380	25	1 405
fängelse *simple imprisonment*	502	462	497	430	615	3	618
förvaring *preventive detention*	92	94	98	97	102	1	103
internering *internment*	3	—	—	—	—	—	—
ungdomsfängelse[1] *youth prison*[1]	5	7	3	8	8	—	8
Summa *Total*	1 665	1 668	1 758	1 746	2 105	29	2 134

[1] Tidigare endast frihetsstraff. *Previously only imprisonment at labour or simple imprisonment.*

Kungl. Boktr. Sthlm 1952

THE PUBLIC EDUCATIONAL SYSTEM IN SWEDEN

TDV İSAM
Kütüphanesi Arşivi
No 059-126/6

THE BOARD OF EDUCATION

THE PUBLIC EDUCATIONAL SYSTEM IN SWEDEN

THE BOARD OF EDUCATION

TDV İSAM
Kütüphanesi Arşivi
No 059-126/6

THE BOARD OF EDUCATION.

Most of the schools in Sweden ultimately come under the authority of the Board of Education (Kungl. Skolöverstyrelsen), which is a civil service division under the Ministry of Education and Ecclesiastical Affairs. Of the schools which do not come under the authority of the Board of Education, the most important are the various vocational institutes (including technical and commercial upper secondary schools) that come under the Board of Vocational Training, a body comparable and equal in status to the Board of Education.

The Board of Education is headed by a Director-General. Of the other seventeen members of this Board fifteen are chief inspectors, called counciors of education, and two are heads of administration. The latter two belong to the Board's administrative department, one of them being in charge of it. The fifteen councillors belong either to the elementary or the secondary school departments, each of which is headed by one of these councillors acting as departmental chief.

These three departments are subdivided into sections. In the secondary school department there are, in addition to the departmental chief's own section, seven others, six of which are headed by councillors and the seventh by a principal administrative secretary. The duties of the departmental chief include acting as chairman at the meetings of the department in the absence of the Director-General, and dealing with matters that concern the headmasters of the higher schools and institutes. The respective heads of the sections report to their departmental chief on the majority of the matters listed below. The seven sections are concerned in the main with the following seven spheres respectively: 1) private schools and the majority of the higher municipal schools; 2) teachers' training, work and duties; premises for higher state schools; 3) examinations, pupils' certificates, and matters concerning foreign teachers in Swedish schools; 4) teachers' qualifications; questions of organization, including the establishment of new schools; 5) the state schools' requirements of non-established (icke-ordinarie) teachers (i. e., teachers who are appointed for a limited period only); questions of discipline; the handling of extensive inquiries in general; 6) vocational training secondary schools (praktiska mellanskolor) and higher elementary schools; 7) pupils' boarding houses and school funds.

The elementary school department is also made up of eight sections, over the first of which the departmental chief presides. These sections deal principally with the following spheres: 1) the inspection of elementary schools; 2) training colleges for junior elementary and elementary school teachers; 3) appeals against appointments made by the authorities to posts in junior elementary and elementary schools; Swedish schools abroad; 4) the teaching of the blind, the deaf-and-dumb and the mentally deficient; 5) elementary school buildings; pupils' transport to school; 6) the organization of the educational area; continuation schools; teaching materials, school radio programmes and films made specially for schools; 7) adult education; people's high schools (folkhögskolor) and independent voluntary work in the cultural education of the people; 8) educational experiments; questions regarding the function of school psychologists.

The administrative department deals with matters concerning the organization of the Board of Education, salaries, points of statute and teachers' pensions and retirement.

In addition to these three departments of the Board of Education, there are also a statistical department, in the charge of a chief clerk, and four independent sections: 1) the health section, under the direction of a superintendent medical officer for schools, and his assistant; 2) the physical training section, directed by a senior physical training adviser and a physical training adviser; 3) the library section, under the direction of a senior consulting librarian and a consulting librarian; 4) the domestic science section, under the direction of a domestic science adviser. There are also advisers on special branches of education, such as instruction in drawing, the teaching of the blind, and temperance instruction.

In all matters in which the Director-General takes part, he alone makes the decisions, except, however, in certain more important questions that call for joint discussion in the presence of at least two members of the department or each of the departments concerned. Such questions include drawing up supply estimates to be presented to Parliament, making nominations for appointments to teaching posts that have to be authorized by sanction of the government, as well as questions concerning organization, the inspection of schools, and the checking of teachers' errors and cases of teachers' negligence.

THE ELEMENTARY SCHOOL.

The elementary school is the foundation on which the Swedish school system is built, and gives about two-thirds of the Swedish children the whole of their

schooling. The remaining one-third, after four or six years in the elementary school, gain admission into the higher state or higher municipal schools. An insignificant percentage of the Swedish children are given their earliest instruction in private four-year schools. These schools number less than twenty-five and account for about 2,500 pupils in all. By way of comparison, it may be mentioned that the number of pupils in the first four classes of the elementary schools amounts to over 400,000. The total number of elementary school pupils in the year 1948 was 610,000.

The period of compulsory school attendance is reckoned from the calendar year during which a child reaches the age of seven until that during which it reaches the age of fourteen. If the parents wish, however, the child can start attending school in the year during which it reaches the age of six, provided that medical inspection and other tests show that it is ready for school.

Either seven or, by special permission in certain educational areas, eight compulsory years of schooling are covered in the elementary schools. The eight-year group includes a number of large areas, jointly containing about a fifth of the population of Sweden. The first two years of the elementary school, during which instruction in the basic subjects is given, together form the *junior elementary school* (småskolan). The remaining years constitute the *elementary school proper*.

For the continued education of the pupils who leave the seven-year elementary school and do not pass on to some other school or institute, compulsory *continuation schools* have been established, providing a year's course consisting of at least 180 lessons. The continuation schools are either general or vocational. A subject characteristic of the former type is citizenship, whereas in the latter, teaching is mainly concerned with practical work in housecraft or in some local trade.

To provide for the instruction of mentally retarded children an ever-increasing number of local educational authorities are establishing special *auxiliary classes* in their areas. The largest areas, moreover, run *special classes* for children with difficulties in reading and writing, for children who have weak hearing or who stammer, and for psychologically or physically disabled children. The *mentally deficient* children capable of some education are taught in special institutions, and are not permitted to attend the ordinary elementary school for normal pupils.

There are no compulsory *infant schools*, but voluntary schools of this type are becoming more and more common.

The subjects taught in the elementary schools are scripture, Swedish, arithmetic and geometry, local knowledge together with practical exercises (hembygdsundervisning med arbetsövningar), history, geography, natural science of all

kinds (including biology, zoology and botany), drawing, singing and physical training with games and athletics. In most areas, handicraft, household work and gardening are studied as well. In addition, instruction in English is being introduced more and more. Formerly English — when it occurred — was given in the seventh and eighth years of the school only, but it has now been carried down to the fifth and sixth too. Many elementary schools make extensive use of the special English lessons given twice a week on the radio.

In the eighth year such subjects as book-keeping, shorthand, typing and industrial and craft work (sometimes taking up nearly half of the time-table) are very frequently included in the curriculum.

Both the junior elementary school and the elementary school proper use the teacher-and-class system, which means that the teacher takes his or her class in all or nearly all subjects.

In elementary schools the school year normally totals 39 weeks, divided into an autumn term lasting from the end of August until a few days before Christmas, and a spring term from the beginning or middle of January up to a roughly corresponding date in June.

The teaching in the elementary schools proper is done by teachers who have received their diploma at an elementary school teachers' training college (folkskoleseminarium). The main kinds of elementary schools give full-time instruction. They are called the A- and B-forms. The A-form is distinguished by the fact that the pupils in each year make up at least one whole class, requiring a teacher to themselves; in the B-forms various combinations of two or more years or classes make up a group of which only one teacher is in control. In exceptional cases there are also other forms of elementary schools. Thus some give instruction for only half of the full teaching week (the C-forms), and in some, called the lesser elementary schools, the teaching even in the elementary school proper is given by teachers trained only for junior school work (the D-forms).

The local administrative unit of education for the elementary schools is called the educational area or the school district. The country is divided into approximately 2,500 educational areas, the boundaries of which usually coincide with those of a rural or urban district. From the beginning of 1952, however, the number of districts is to be reduced to rather more than a thousand. Within an educational area, the immediate control and direction of elementary school affairs is in the hands of a locally elected elementary school board. In larger areas inspectors or superintendents, responsible to the school board, are entrusted with fulfilling these duties.

State supervision of the elementary schools is carried out by 52 *elementary school inspectors*, each one working within his own district. The *cathedral chapters*

function as higher intermediate authorities in elementary school affairs, and in financial questions the *county boards* function in a similar manner. As has already been mentioned in the opening paragraph, the ultimate control of the elementary schools is exercised by the *Board of Education.*

The State has now shouldered most of the expenses that are incurred in elementary school education. This is also true of the numerous social services generally provided. Thus the State subsidizes school health services, free school meals and the provision of teaching materials and of free text-books and the like for pupils. The exceptional forms of elementary school are gradually disappearing, owing to State subsidies for pupils' transport to school and of the boarding-in of children from inaccessible parts of the country in the nearest town or village with an elementary school. The State also subsidizes school building and the erection of dwellings for elementary school teachers. As a result of these undertakings by the State, compulsory schooling, which has been for so long a municipal concern, is now coming more and more under the influence and control of the State.

THE SECONDARY SCHOOLS.

Among the secondary schools which take in pupils while they are still of compulsory school age, the *lower state secondary school* (realskola) is the most important. Its goal is the Lower Certificate (realexamen). Other schools of this type are the municipal secondary schools (kommunala realskolor), which also lead up to the Lower Certificate, the girls' municipal secondary schools (kommunala flickskolor), the vocational training secondary schools (praktiska kommunala realskolor), leading up to the Vocational Lower Certificate (praktisk realexamen), the higher elementary schools (högre folkskolor), and various kinds of private secondary schools (privatläroverk).

The upper state secondary school (gymnasium) is built on the lower, and works up to the Higher Certificate (studentexamen).

The state secondary schools (allmänna läroverk) are either full (högre allmänna läroverk), comprising both higher and lower sections, or lower only, not going beyond Lower Certificate standard. Most of these are mixed schools (samläroverk), but in the larger towns there are also secondary schools set apart for boys or for girls alone. At present the full state secondary schools number 66 and the lower 155; 27 of the latter have municipal upper secondary schools (kommunala gymnasier) attached.

There is a double connection between the elementary and the lower state secondary schools: the latter have a five-year course based on the fourth class of the main kinds of elementary school, and a four-year course based on their

sixth. At the moment, both courses are found in 72 schools, only the four-year course in 134 and only the five-year in 15.

The admission of pupils into the first year of secondary schools is worked out almost invariably on the basis of the graded reports given to the pupil in the elementary school. To be admitted, a certain minimum total is required, which is reckoned up by adding together the grades in the reports; but in most schools the competition is so keen that a pupil must have a considerably higher total than the minimum in order to gain admission. Elementary school pupils who are not satisfied with the reports given them there, have the right to sit for the school entrance test. Pupils from a year below the normal transition year must undergo the test.

The main kind of state secondary school provides a curriculum of a general nature, which is always found in the lower section of the schools whether they stand alone or are part of a full state secondary school. In addition, 42 state secondary schools have practical courses, usually commercial. These courses extend over two years and run parallel with the two highest years of the lower state secondary school.

Among the compulsory subjects in the lower state secondary schools are English, introduced in the first year as the primary modern language, and German, introduced in the second year of the four-year course, and in the third of the five-year, i. e. three years before the Lower Certificate. French is optional, and has until now been read in the two higher classes of the lower school, but from 1952 it will be read only in the highest. French was chosen by more than two-thirds of the pupils in the lower of these classes and by nearly half in the higher. A knowledge of the subject is required for entrance into the upper secondary school, where it is compulsory.

No other modern languages are taught in the lower state secondary schools, neither is Latin nor Greek.

At the end of the spring term of the fourth and the fifth year respectively, pupils who have followed the general curriculum sit for the *Lower Certificate* examination. This includes written examinations in Swedish, English, German and mathematics. The examinations are set by the Board of Education and are standard for all schools. In the oral examinations the pupils are tested in four particular school subjects, these subjects also being fixed by the Board of Education. Similarly, pupils taking the practical course are set a Vocational Lower Certificate at the end of their fourth year.

At the state and municipal schools and institutes the failures in the Lower Certificate amount to between five and ten per cent. Those who fail are given the opportunity of taking their Lower Certificate again at the end of the autumn term if they so desire.

At present, about 10,000 candidates are successful in their Lower Certificate every spring. About 500 of these have been taught privately, often by correspondence. Such candidates must undergo oral examinations in all subjects.

The *municipal secondary schools* are of the same general type as the four-year lower state secondary schools. Their syllabuses and curricula are identical. They differ from each other only in administrative and financial respects.

The *girls' municipal secondary schools* have no examinations. They provide a seven-year course based on the fourth class of the elementary school, and a six-year course based on its sixth class. A girl who passes through this school is entitled to the Qualifying Certificate (normalskolekompetens), which is of equal value with the Lower Certificate. The girls' school curriculum is marked, among other things, by a slower pace of study than that found in the lower state secondary school.

The *higher elementary school* originally had the task of providing opportunities for gifted children from the working classes to acquire the preliminary knowledge necessary for private study in the future. The higher elementary schools, like the continuation schools, are either general or vocational. In recent years, many general higher elementary schools have been converted into municipal secondary schools — it can be taken as a general rule that this happens — whilst the mainly vocational higher elementary schools have in many cases been enlarged and converted into vocational training secondary schools.

The *vocational training secondary schools* lead up to the Vocational Lower Certificate via three courses, the commercial, the technical, and the course in domestic science.

The *private schools* which take in pupils over eleven do not as a rule differ a great deal from the corresponding state or municipal schools with regard to curricula or the formation of classes. Some are boarding schools accepting as pupils the children of Swedes living abroad, children from rural districts where there are no secondary schools and children with special family circumstances.

The following particulars give some idea of the number of pupils involved in the different courses. In the autumn term of 1948, the first class of the five-year course in the lower state secondary schools contained 8,617 pupils; the first class of the girls' secondary schools with a seven-year course 3,254, of the four-year course of the lower state secondary schools, together with the municipal secondary schools and the four-year higher elementary schools with the general curriculum 12,540, of the girls' schools with a six-year course 338, of the vocational training secondary schools 2,440, and of the higher elementary schools with courses of less than four years 723. These figures may be compared

with the yearly average of living births in Sweden during the latter part of the nineteen-thirties: 93,000.

The *upper state secondary schools* run two sides, a classical side (latingymnasium) and a modern one (realgymnasium), very roughly corresponding to the English division into arts and sciences. Both three- and four-year courses are given on each side. Most full state secondary schools, however, provide only one course in each, usually a four-year course in arts and a three-year in sciences, and one of them has a modern side only. With one exception, the 26 municipal upper secondary schools run three-year courses. Of these, 15 have only a modern side, one only an arts side, and 10 have both.

The number of pupils on the modern side is about twice as great as the number on the classical side.

In certain private schools a modern language side is also run in the two highest years. According to secondary school statutes now in force, a group of six-year courses, having a modern language side as well as an arts and a science side, and carrying on from the elementary school's six-year course, should exist, but these sides have now been discontinued on account of an in sufficient flow of pupils.

The classes in the upper state secondary schools are called »ringar».

Whilst in the first two classes of these schools the same subjects are taken by all pupils on each side, in the two highest the pupils begin to specialize. A certain freedom of choice is allowed, enabling the pupils to choose, in addition to the five compulsory subjects, a group of optional ones, usually three in number, but only two if either Greek or Russian forms one of the group. Pupils can further be given permission to read one additional subject. Drawing, music, and physical training with games and athletics are also compulsory for all secondary school pupils.

In the two highest years of the upper state secondary schools pupils have to do individual work on some specified theme.

In secondary schools homework is set each day in an average of three subjects. No homework may be set for the weekends.

Studies at the upper state secondary schools are designed to lead up to the *Higher Certificate* at the end of the spring term for the pupils in the highest year. This examination is held in the schools; it is partly written, with at least three papers per pupil, and partly oral, with four subjects taken before the examining commissioners, the majority of whom are university professors. The written examinations are standard for all schools and are set by the Board of Education. From the subjects studied in the schools particular sections are chosen by the commissioners, on which the oral examinations, conducted by

the teachers themselves, are to be held. The commissioners can themselves also conduct the examinations.

Among the schools' own pupils — i. e., excluding private pupils — the average percentage of failures for the last five spring terms in the written part of the Higher Certificate has been 8 and in the oral part 6, making 14 in all. Successful Higher Certificate candidates number about 4,000 each spring term, of whom about 100 have been taught privately, often by correspondence. The autumn term Higher Certificate is usually only taken by pupils who failed in the spring and by pupils who have been taught privately.

In the state, municipal, vocational training, and girls' municipal secondary schools the academic year consists of 38 weeks, not counting the days set apart for entrance tests and tests to check the fitness of border-line pupils who want to move to the next class. The autumn term begins towards the end of August or at the latest on the first week-day in September, and goes on till a few days before Christmas. The spring term begins about the 10th of January and usually continues until the first week in June. The week's holiday at Easter, the three days at Whitsun, and the other free days (not more than 6) and open-air days (not more than 12) fixed by the headmaster are reckoned in the academic year. As a rule, a number of free days are lumped together to make a week's winter holiday in the spring term, in February or March.

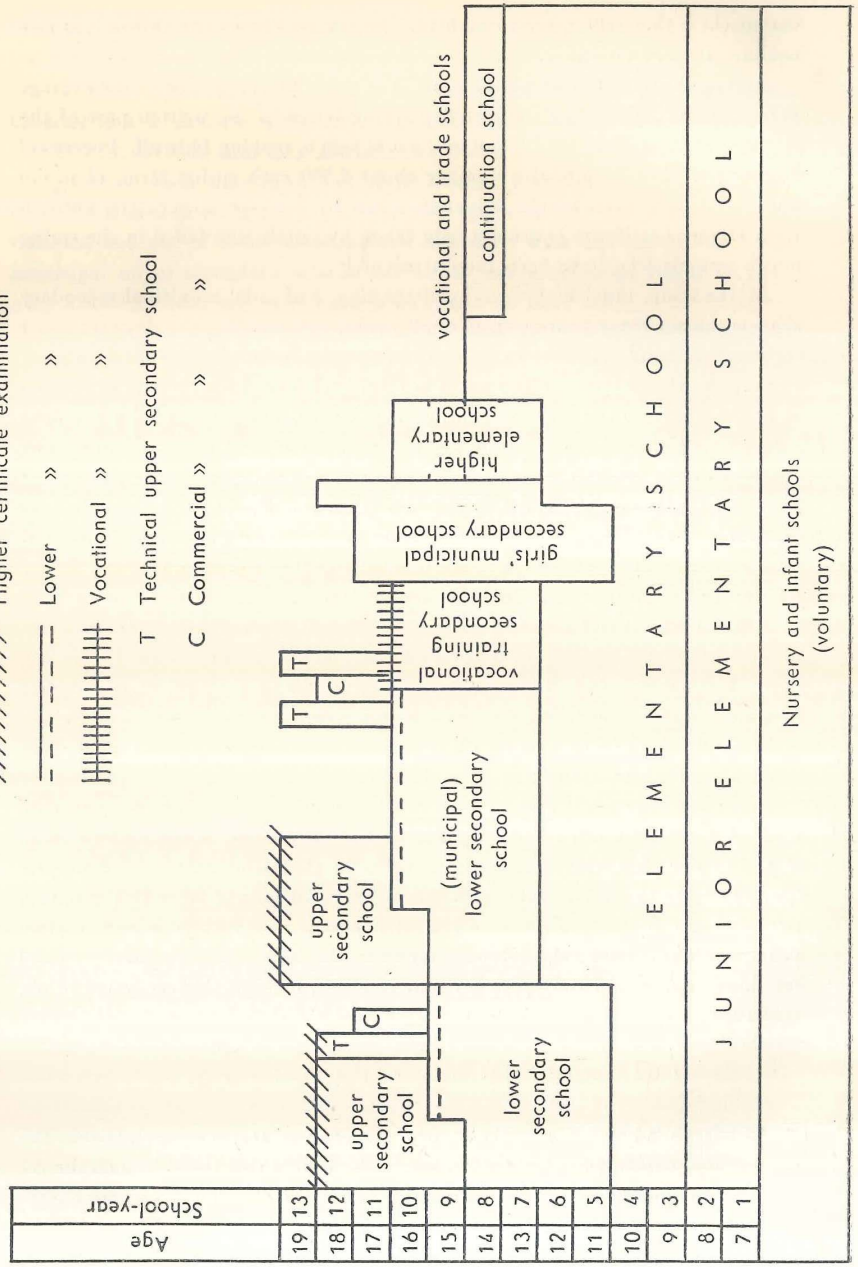
A pupil who is not moved to the next class at the end of the spring term usually has the opportunity at the beginning of the autumn term of putting down his name for the tests for border-line pupils in the subject or subjects in which he has failed.

The following diagram (page 12) shows the most common types of schools in Sweden and their respective organization.

From this diagram it may be seen in what ways a pupil in Sweden can pass through school. He can receive his Higher Certificate after spending two years in the junior elementary school, two years in the elementary school proper, four or five in the lower state secondary school and four or three in the upper, twelve years in all. He can also attend the junior elementary school for two years, the elementary school proper for four, the lower state secondary school for three or four and the upper for four or three, making thirteen years in all.

TEACHERS' TRAINING AND CATEGORIES.

As has already been remarked, two categories of teachers work within the elementary school, those trained for the junior school and those trained for the elementary school proper. The junior school teachers are almost without excep-



tion women. They are trained in the two-year junior elementary school training colleges (småskoleseminarier) set up and maintained by the State. To be admitted to one of these training colleges a pupil must have the Lower Certificate or knowledge of a corresponding standard in most of its subjects. The colleges number ten, three of which were set up provisionally on account of the prevailing shortage of teachers. At present they can turn out about 870 trained teachers yearly.

Teachers for the elementary schools proper are trained at nineteen State-run elementary school teachers' training colleges (folkskoleseminarier). Six of these take in male pupils only and five female only, while eight are mixed. Nine of these colleges have been set up provisionally.

Pupils with the Lower Certificate or a corresponding standard of knowledge follow a four-year course at the colleges, and pupils holding the Higher Certificate, a two-year course. At present about 1,550 trained elementary school teachers, comprising about 850 men and 700 women, are turned out each year.

The students in the training colleges have at their disposal special elementary schools in which they can practise teaching. These practice schools (övningsskolor) are generally attached to the training colleges, but, to a certain extent, classes in the elementary schools of towns in which training colleges are found are also placed at the students' disposal for practice in teaching.

All secondary school teachers in theoretical subjects now receive an academic education and practical training in teaching (praktisk lärarkurs) for either a term or a full academic year. Normally several terms of work as an assistant teacher intervene between the academic and the practical training. In this way the teacher can develop a certain familiarity with his profession and confidence in himself.

To qualify as a teacher at a state secondary school one requires a degree in a group of two, or most often three, school subjects as well as qualification in a shorter theoretical course in general and educational psychology. Whoever takes this degree receives the title of »filosofie magister», and after completing the term or year of practical training and also at least four terms of teaching as an assistant, can be appointed to a master's post (adjunktstjänst) at a state secondary school. The university education necessary for a teacher of scripture includes a degree in theology and a separate examination in some one school subject.

Besides the masters, a smaller number of lectors work in the full state secondary schools, chiefly in the higher part of the school. (A great deal of the teaching in this part is done by the masters, however.) To qualify as a lector, over and above what is required for a master, one must have passed the »filosofie licentiat» (or »teologie licentiat») examination and, further, have published and

defended a thesis for the degree of doctor of philosophy (or divinity). Exemption from this last condition can be granted by the government.

In secondary schools, teachers of theoretical subjects normally teach only in the two or three subjects which they took in their degree and which constitute the post they occupy. Each class has a teacher appointed as classmaster and is usually taught more frequently by him than by other teachers.

The established (ordinarie) teachers of theoretical subjects at the elementary school teachers' training colleges are lectors and hold the qualifications required for lectors at the full state secondary schools. The non-established staff must be qualified lectors or masters.

The teachers of theoretical subjects in the junior elementary school teachers' training colleges are masters holding the qualifications required for masters at the state secondary schools.

The teachers in the practice schools attached to the training colleges are elementary school teachers.

Teachers of subjects exercising skills receive a special training at separate training institutes.

THE EDUCATION ACT OF 1950.

In 1950, Parliament passed a resolution on a school-reform that is to be carried out after a period of comprehensive experiments. The resolution is drawn up under the following twelve points:

1. Within a period which, taking into consideration what the committee has reported on the matter, will later be fixed, steps are to be taken to establish a unity school (enhetsskola) on the basis of nine compulsory years of schooling for all. This school is intended to replace the elementary schools, the continuation schools, the higher elementary schools, the municipal secondary schools and the lower state secondary schools to the degree shown to be expedient by the above-mentioned experiments.

2. Comprehensive tests in order to find the most suitable organization for the unity school are to be arranged, as well as tests on the differentiation of pupils and on the diversification of courses of study with regard to variation in pupils' aptitudes and abilities, on the methods and curricula of the unity school and on the admission of pupils to the unity school according to selection based on school-fitness tests.

In like manner experiments are to be carried out with various kinds of vocational lower secondary schools.

3. The unity school is designed to have three stages, each normally taking

three years. The teaching in each of these stages will be done by teachers specially trained for work mainly on the stage in question.

4. Instruction in English is to be planned to start in the fifth year of the unity school.

5. In addition to guidance in practical subjects throughout the various stages of the unity school, a general introduction to trades and professions is to be given in the seventh and eighth years. In the ninth there is to be arranged, in close contact with professional and working life, either a preparatory vocational training, or, where the circumstances give cause for it, a practical training of a general nature.

Suitable ways of linking schools for vocational training and the vocational training secondary schools on the one hand with the unity school on the other should be considered and appropriate tests carried out during the experimental period.

6. For pupils in the ninth year who do not take part in the preparatory vocational or the general practical training, theoretical instruction is to be arranged, connected or unconnected with continued education in the upper state secondary schools.

7. From a date to be fixed later, a »general» side, besides the two now existing, is to be included in the curriculum of the upper state secondary schools. In connection with this, a revision of the system of specialization operating in the latter years of the upper state secondary schools is to be undertaken, with the object of bringing about a more fixed course in any given line of study. (The classical side will offer two alternatives — with or without Greek —, the general side likewise two — a modern language branch and a social branch, the latter with mathematics —, and the modern side also two — one including physics as an important subject, the other biology).

8. At a date to be fixed later, one or more upper secondary schools for adults are to be set up experimentally.

9. Experiments are to be carried out with special forms of upper state secondary schools linking up with the unity school.

10. Terminal fees at the state secondary schools and the corresponding municipal schools and institutes are to be discontinued as soon as possible, in an order not yet determined.

11. The requisite financial support is to be given to ensure that every pupil has access to an education corresponding to his personal abilities and to the needs of the community.

12. The Board of Education, with a staff suitably strengthened for the purpose, is to direct these experiments and draw up all reports on them. The National

Institute for Educational Psychology is to be enlarged, and any further steps deemed suitable are to be taken.

So comprehensive a school-reform will naturally enough entail considerable expense. It has been estimated that, at present, education costs the State and municipalities nearly 3 % of the national income. About another 1 % will presumably have to be claimed when the school-reform has been put into full operation. A certain further increase will ensue automatically as a result of the rise in child population.

In the nineteen-twenties, the national expenditure on schools amounted to between 15 % and 20 % of the total real expenditure. During the second world war, it sank to 7 % as a result of increased defence expenditure, after which it began to rise again and now amounts to about 11 %. The principal items of expenditure in round figures are: the Board of Education, 2,5 million kronor (c. £ 170,000); teachers' training colleges and institutes, 14,5 millions (c. £ 970,000); the elementary school system, 313 millions (c. £ 20,900,000); the state secondary schools etc., 95 millions (c. £ 6,300,000); higher elementary schools and people's high schools, 7,5 millions (c. £ 500,000); the teaching of abnormal children, 5 millions (c. £ 350,000); vocational training, 26 millions (c. £ 1,750,000); and school meals, 17 millions (c. £ 1,150,000).

TDV İSAM
Kütüphanesi Arşivi
No 059-126/6

Stockholm 1952. Printed by K. L. Beckman
948 51

TDV İSAM
Kütüphanesi Arşivi
No 059-126/7

UNIVERSITY OF LEEDS
INSTITUTE OF EDUCATION

BULLETIN

No. 10 JUNE 1952

Director
PROFESSOR W. R. NIBLETT B.A. B.Litt.

Editor
MISS S. K. MCCULLAGH M.A.

CONTENTS

FOREWORD

THERE are two new features in this issue of the Bulletin. We are always being asked questions about the Institute and the opportunities it offers to students, teachers and educationists within the area, and we have therefore started a series of brief articles on *The Work of the Institute*, beginning in this issue with an account of the Institute Library, which is at the same time an invitation to those who would like to belong to it but have not already joined. We hope to publish short accounts of other aspects of the Institute's work in subsequent issues.

The other feature is the inclusion of notes on publications of which teachers may not otherwise be aware and which may be of interest and use to them. All the publications mentioned are to be found in the Institute's Library.

The Editor also wishes to invite letters from readers, either concerning topics arising

from articles published in the *Bulletin*, or on matters of general educational interest, for publication in subsequent issues.

May we remind readers that, in order to receive copies of the *Bulletin* for the next three terms, they should fill in the accompanying form and return it to the Secretary as soon as possible.

INSTITUTE NEWS

F. M. Earle B.Sc., M.Ed., D.Sc.

IT is with great regret that we have to record the sudden death of Dr. F. M. Earle, on Tuesday, 11th March, 1952.

Dr. F. M. Earle was the first Research Fellow of the Institute and was appointed for the period 1949-1951. He came to the Institute singularly well-qualified for his work. He had been Professor of Education in the Rhodes University College, Grahamstown, South Africa, Head of the Vocational and Educational Department of the N.I.I.P., and Principal of Kirkcaldy High School. He had also designed the Fife Tests of Ability in Algebra, English, Geometry and Science, and was the author of *Reconstruction in the Secondary School.*

In the course of his research work here on student attitudes and interests, Dr. Earle became well-known in the Colleges and in the University, for he interviewed many students and was also incidentally able to help many with the advice which he was so well-qualified to give. He had also lectured in various Institute Diploma and short courses. There was no doubt of his pleasure in returning to the University from which he had graduated in Science in 1910.

On relinquishing the tenure of his Fellowship in 1951, Dr. Earle returned to his home in Saffron Walden, but he had only a short leisure for he was offered and accepted a post as Educational Psychologist to the Royal Eastern Counties Institution, Colchester.

Right up to the day of his death Dr. Earle's energies were unimpaired, and he had been looking forward to his research into problems of mental deficiency for which he had prepared a programme which, as he said, would "occupy me fully for the next two years".

A summary of the main findings of the research he did at Leeds is to appear as an article in the first number of *The British Journal of Educational Studies*, to be published this autumn.

A.A.E.

The Library

Mr. E. R. S. Fifoot M.C., B.A., A.L.A., has been appointed Librarian-in-Charge to succeed Mr. Goodman who has resigned with the intention of returning to the Army. Mr. Fifoot has been Assistant Librarian in the Institute Library since September 1950, when he took over responsibility for revising the catalogue and the whole of the cataloguing and classification work. The importance of the catalogue is rarely appreciated to the full by the ordinary reader, but there is evidence that students are gradually becoming aware of the value of Mr. Fifoot's work and are coming to recognise that an intelligent and thoughtful use of the catalogue is the only key to the full resources of the Library.

Before coming to Leeds from the London University School of Librarianship, Mr. Fifoot served on the staff of the Bodleian Library.

E.E.G.

Bretton Hall

We have been asked to include a note of the dates of the following events which will take place this term at Bretton Hall:—

June 27th and 28th..	College open to Visitors
July 12th and 13th ..	Residential meeting: British Psychological Society (Northern Branch)
July 15th to 25th ..	Residential course in the Arts for older pupils of Secondary Schools

THE WORK OF THE INSTITUTE

The Institute Library

An Invitation to Teachers and Students

E. R. S. Fifoot M.C., B.A., A.L.A., Librarian-in-Charge

IT seems that the facilities offered by the Institute's Library are not yet known to all who might be interested. Any teacher, any student, any administrator of education may apply to join. There is no charge.

What is the Institute Library? It was set up as an integral part of the Institute of Education to serve the professional interests of teachers and students in the Institute's area by supplying them with the books and periodicals they require. As the Institute is part of the University of Leeds, so the Institute Library is a part of the University Library; but it is situated in another building, and membership of the Institute Library does not carry the right to use the main University Library.

It is an educational library. Its stock of over 6,000 books and some eighty current periodicals is concerned solely with education and with topics related to education, such as general psychology, sociology, and philosophy. The library is still growing very fast, but it already claims to have an adequate basic stock in all its subjects, and works not in the library can frequently be borrowed through the national inter-library loan schemes. One deliberate limitation is that it does not acquire books in the subject-fields of the curriculum: for example, it possesses books on the teaching of history, but not the Oxford History of England. To include books on curriculum subjects would require a library of vast dimensions, and furthermore would merely duplicate the contents of the excellent public libraries in the area.

A small collection of textbooks is being built up, with the object of providing a selection of the best books in each subject in the school curriculum. Every candidate for this collection is being scrupulously examined by specialists, but it should be emphasised that this does not mean that any textbook is "recommended" by the Institute of Education. It is hoped that the collection will be available in the summer.

The library may be used either by post or personally. Anyone living outside the Leeds City Boundary may borrow books by post. The library pays postage on books sent to borrowers, who return them at their own expense. For the use of postal borrowers a select list of new books and recent periodical articles is issued monthly, and sent free of charge to those who ask for it. Applications to join the library should be addressed to:

The Librarian-in-Charge, The University of Leeds Institute of Education,
The University, Leeds, 2. (Telephone Leeds 31751, Extn. 357).

For personal borrowers the Library, situated at 5, University Road, on the first floor, is open from 9 a.m. to 7 p.m. on Monday to Friday, and 9 a.m. to 12-30 p.m. on Saturday, closing at 5 p.m. on weekdays in July, August and September.

THE PLACE OF PARENTS IN EDUCATION: A CASE FOR PARENTS' ASSOCIATIONS

T. G. C. Woodford M.A., Headmaster, Richmond School

IT is a most urgent need in education to-day to bring together in a spirit of free and willing partnership parents, teachers and administrators, for unless that partnership exists the Act of 1944 cannot make upon society the concerted impression which is its purpose: indeed it may well tend to set up an educational dictatorship alien to all that is best in our beliefs and traditions.

The Act of 1944 has fairly met a complaint, so often levelled at educational legislation, that the wishes and interests of parents have been neglected. Section 36 enacts that "It shall be the duty of the parent of every child of compulsory school age to cause him to receive efficient full-time education suitable to his age, ability and aptitude, either by regular attendance at school or otherwise". And in Section 76 we read that "pupils are to be educated in accordance with the wishes of their parents". If we are to take seriously no more than these two highly important references to parents in the Act, we in the schools cannot escape our plain duty in the matter. For the Act to be healthy and vigorous, constructive and progressive, parents must be able to play their full part. The legislator opened the door to them: schools and administrators must not slam it shut in their faces.

It is not enough to wait for individual parents to approach the schools, for they will fight shy of taking the initiative. It is not enough to rely upon the informal contacts which every good school seeks to establish with its parents. It is not enough for a headmaster to send out an occasional circular letter. It is not enough to use Speech Days and other school functions as opportunities for helping the parents to grasp what is going on. A closer, more intimate, more unified, more continuous contact is required. Parents need to be enlightened if they are to understand the world in which their children now move; they need to know more of their children at school, and school teachers need to know more of them at home. In parents' associations a worth-while effort can be made to meet these needs.

An essential condition of success of a parents' association is that the headmaster, convinced of its value and certain of its purpose, shall be determined to give it a fair trial; a second condition is that he shall have the whole-hearted support of his staff. As a new headmaster, and feeling strongly that an association was needed, I discussed the project with my staff, who proved to be as enthusiastic as myself. Certainly there were difficulties. We might receive little response from the parents; it might lead to additional work which we could not fairly undertake; a small group of parents could dominate the venture; there might be attempts to interfere in the running of the school. We were agreed, however, that, since we could between us guarantee the first two conditions of success, these difficulties could be confidently faced, for we were certain, too, that we could guarantee a third condition of success, namely the presence among our parents of that interest and desire to co-operate which would enable us to meet together in an atmosphere of trust, helpfulness, and respect for each other. And finally we believed that we had happy relations with the boys themselves.

Believing that an association should not be "wished upon" the parents, but should spring from within, from a growing sense of unity and responsibility, we were to wait a whole year before our own association emerged. Meanwhile we had invited parents to the school on several occasions, and if numbers form any criterion, these meetings had been a great success. For the great majority of the parents there had been no previous direct contact with the school. They had not thought it right, they maintained, to trouble the headmaster and masters with problems which might appear trivial and entirely personal.

They confessed that they shrank from seeking an interview, and many commented that an appointment in school hours was, in any case, quite impossible for them. I was particularly interested in these remarks, for many who do not sympathise with the idea of parents' associations argue that if they were established private interviews would tend to disappear. Nothing, in my experience, could be further from the truth.

As we had hoped, the growing sense of unity which had developed at these meetings produced a request from the parents for an association to be formed, but by that time we had done much to prepare the way. We had to be quite certain that the object of an association was fully understood. Its purpose is to assist the headmaster and his staff on the one hand and the parents on the other in their joint task of educating the boys, of facilitating the fullest development of their personalities, and of helping them to choose and prepare for their careers. To be successful we needed freedom on both sides, a willingness to discuss and an ability to listen, and we did not find it hard to agree that the more informally the association could work, the more likely would it be to achieve its purpose. Clearly we needed no constitution, no subscription, no minutes, no agenda; routine business should be kept to a bare minimum. That we have a committee was due to the need for an executive body to work out the details of a scheme, initiated by the parents, to present the school with a small pavilion on one of its playing fields. It has remained in existence because of its usefulness in organising the occasional social evening; its members, elected to represent each year in the school, asked me to act as secretary, an office I gladly accepted as I am convinced that the headmaster should be in a position to direct and control the association. The chairman has come to be one of my most valued counsellors, and I look forward with pleasure to the two or three visits a term which he has fallen into the habit of paying me. He and his committee have never shown the slightest tendency to interfere in any way with the running of the school, for complete confidence exists between us.

Meetings are held once a term, with a social evening in the Christmas and summer terms if the parents so wish. A parents' evening does not necessarily mean a general invitation to them all; we have found it most helpful, for example, to set aside an evening for the parents of boys in a particular year, especially the Sixth and Certificate Forms. A most successful innovation was to invite to the school the parents of the boys entered for the following September. At least one meeting, however, is held for all parents during the year.

A meeting falls into two parts, each lasting about an hour; it begins with a talk and general discussion, it ends with private and informal conversations. The first part enables me to keep parents informed upon a great many aspects of the school's life and activities, and upon many educational questions in general.

It is during general discussions that so many of the anxieties of parents are revealed, and although there is no space to consider them here I am convinced that if our association does nothing else but talk about such matters, its existence is fully justified.

If the first part of the evening is stimulating to the parent, the second part is by far the more valuable—and exacting—for us, for it is in private conversations that we learn so much of the detail of the boys' home life and early history. Smith was severely burnt when he was three; Jones was only seven when he found his father dead in his chair; Wright talks of nothing else at home but Egyptian mummies and excavations—but the list is endless. Such valuable bits of information, tossed casually forward in the course of a conversation, are vital to our understanding of the boys and to the accomplishment of our task for them, and they rarely emerge from the normal visits of parents to a headmaster. It can fairly be argued that the primary responsibility for a child's education does not lie with his school, or with his church, or with the state, but with his parents; the schoolmaster, working alone, is working largely in the dark. It is

his knowledge and understanding of the parents and their homes that cast sudden rich gleams of light on the temperament and personality of the children. How much richer and more sensitive is his handling of the boys, and how much more fruitful. I dare hope, too, that the parents' relationship with their sons is set in a new, more tolerant, more enlightened background.

Attendance at our meetings has never been 100 per cent. We do not expect it to be; but we know that over the past two years we have seen or talked with one parent at least of almost every boy in the school. We make a practice of comparing notes after meetings to discover which parents have not attended; these I then approach as occasion offers. I am satisfied that no parent is opposed to the association in principle, and that all parents welcome the opportunity to learn more of both the educational system in general and of the school in particular.

That the association has been of help to the parents is obvious from the way in which discussions develop, and from comments made privately to my staff and myself. Coming to school themselves, discovering that it has a quiet, humane and friendly atmosphere, listening to explanations of school mysteries, taking part in discussions both general and private, helping in practical ways, meeting each other—all this is an adventure, richly enjoyed. But there is something far deeper. Many parents, whilst they are grateful for the welfare services instituted by the Act of 1944, for milk, meals, medicine and maintenance allowances, feel acutely their loss of responsibility and are genuinely alarmed lest their children should learn to dissociate them from services which many argue rightly belong to them. They resent remarks such as one made recently in Parliament in which a certain member, after declaring that the country was spending too much on welfare in education, went on to say that parents should be made to shoulder their responsibilities themselves. It is the word "made" which gives offence, for it shows a lamentable absence of sympathy. Whether we like it or not, the Act, as with so much welfare legislation, has removed many of those responsibilities, probably never to be restored as they were before. The least enlightened would have parents do little more than to feed the children into the machine. New responsibilities, however, have been written into the Act, and if parents are encouraged to shoulder them their self-respect and self-confidence will be restored. It is for this reason that a parents' association must never be allowed to degenerate into a social club, or an instrument for raising money. It should take its full place within the structure of education, as part of a united effort to fit our children for the part they will have to play if they are to survive in the hard world which also awaits them.

MUSIC AND RELIGIOUS EDUCATION

G. O. Richards M.A., Mus.B., F.R.C.O.

This article is based on a lecture given to a weekend course for teachers at Doncaster arranged by the Sheffield Institute of Education; it will in due course appear in an amplified form in the *Handbook to the West Riding Agreed Syllabus* to be published by The Religious Education Press.—*Editor.*

THE following remarks are an attempt on my part, as a Christian and as a musician, to consider various ways in which music can help to produce real informed worship, that is, worship "in spirit and in truth", in schools.

The first point which, as a specialist musician, I must bear in mind, is the motto which so many composers have in the past put at the head of their manuscripts, the initials AMDG or OAMDG: *omnia ad maiorem Dei gloriam*; everything to the greater glory of God. As the opening sentence of the West Riding Agreed Syllabus says, "Christian worship is the expression of homage and love towards the Father of Our Lord Jesus Christ". It is *not* the expression of the cleverness of children in singing or playing

complicated music, nor the expression of the cleverness of the music staff in teaching them such music. By all means let us glorify God as much as possible by developing and offering to Him as many of our talents as we can, but let us be sure that each talent which we offer to God in a public act of worship is sufficiently under our control for us to be able to offer it to Him without pride on the one hand, or nervous strain on the other.

The first point, then, which I have to bear in mind, is that God should be glorified. But public worship is a corporate act, and in any corporate act there should be a unity of thought or feeling amongst all those taking part. There will of course be considerable variations in the intensity of thought and feeling experienced by individual members of the group. But every member must have some realisation of what the corporate act is intended to convey. We should remember the classic utterance of the nineteenth century judge: "It is not enough that justice should be done; it should seem to be done". In the same way it is not enough for God to be glorified in a public act of worship; He should *seem* to be glorified.

This second point has of course a great number of implications, but there are two particular ones which I wish to stress now. The first implication is that the music of a religious service should never be on the one hand so highbrow that it is a sheer stumbling block to one of the least of God's children present, nor on the other hand so lowbrow and badly performed that it revolts the ears of the more aesthetically sensitive worshippers. The second implication is that every public act of worship should be an artistic performance, which is stage-managed properly, and succeeds in putting across what it is intended to put across. As Macdougall Ferguson says in her excellent book *The School Assembly*: "Each service should run smoothly, without any fumbling or uncertainty of procedure". Some English people often have an unfortunate tendency to feel that if anything is to be sincere it should be unrehearsed, and that there should be no deliberate appeal to the emotions. There is of course a great deal of truth in this line of thought, but a studied refusal to appeal to the emotions (even the aesthetic ones) often itself sets up a most undesirable set of emotional associations.

I have spent quite long enough in enunciating theoretical principles; it is time that I began to apply them to actual cases of the use of music in religious education. Let me begin by dealing with a hymn which admirably suits the thesis that hymns for children should be objective, and should illustrate the great assumptions which underlie all worship, *e.g.*, that God is creator of the world and Father of all men. The hymn to which I refer is No. 396 in the enlarged *Songs of Praise*, *O Father above us, Our Father in might* . . . . which tells in the first twelve of its 33 vivid, particularising verses, how everything in the mineral, the vegetable, and the animal kingdoms is God's; the plants, the flowers, the stones, the roses, the daisies, the butterflies, the bee, the fish, the fox, the beans and potatoes, the roots and the corn, the men in the mills and the mines, the cook by her fire, and children who play by the sea on the sand . . . . It then goes on in verses 17—23 to give as shrewd and happy a set of ethical maxims as I have ever met, particularly the lines: "Give us the wisdom to know what is right, and when to say Yes *and the way to say No*".* (It is not of course suggested that the whole hymn should be sung at once, except on very special occasions; selections of varying length can be used at different times).

Quite apart from the vivid and objective nature of so much of this hymn, it is very valuable because the tune to which it is set is so easy and natural for children to sing. It has a brief chorus *Onward, ever onward go* or *Forward, ever forward now*, which is very handy for the purpose of introducing it to children for the first time. Another advantage of the tune is that all the notes are relatively short except for the first note of the chorus, which is sung to a very important and naturally stressed syllable at the beginning of the

* The *italics* are my own.

word *Onward* or *Forward*, as the case may be. The shortness of the notes is very useful for children, and indeed generally for people who have not been specially trained for singing. Singing modern European music is somewhat of an artificial affair for English people, who are not in the habit of prolonging vowels when they speak to anything like the extent of Italians or others, who wring an intense pleasure out of their long luscious vowel sounds. It is essential however that anyone who takes part in singing should realise at the earliest possible moment that some key vowel sounds have to be prolonged in any piece of vocal music. The most important note by far in this hymn is the first note of the chorus "*For-*" or "*On-*" ward. It is natural and understandable that this note should be prolonged, and children get a great delight in prolonging it.

Most hymn tunes of course contain quite a number of long notes, and teachers must sometimes consider carefully what tunes they should use with particular hymns. At different stages of musical experience children need a different tune, if they are to be able to sing a hymn *worshipfully*. I remember a broadcast by Sir Walford Davies in the 1930's which revealed by implication certain points of great importance regarding the choosing of hymn tunes. The hymn he chose was *The God of Love my Shepherd is*, and the three tunes to which it was sung were *St. Flavian*, *St. Columba* and *University*. I have never seen a hymn book in which *St. Flavian* is set to this hymn, but I feel very definitely that it is a much more suitable tune for young children to sing the hymn to than either *St. Columba* or *University*. Its steady two-beat rhythm is admirably simple, whereas there are two difficulties of rhythm and diction about *St. Columba*. This latter tune is in three-beat rhythm, the accented syllables being held on for at least twice as long as the unaccented. But not only is it in three-beat rhythm; the last syllable of the second and fourth lines has to be held on for an unconscionable time—in fact, while no less than three lengthy notes are sung in the alto and tenor parts. (This arises from the historical fact that *St. Columba* was first set to *The King of Love my Shepherd is* in which the second and fourth lines have double syllable endings "never" and "ever", as opposed to "feed" and "need".) It is practically impossible to get large bodies of children of Primary School age to sing such a long syllable worshipfully, and unless they do sing it for the full amount of time specified, the moving inner parts (alto and tenor) sound very awkward after the voices have stopped.

University, the third tune to which *The God of Love* was sung in Sir Walford Davies' broadcast, and which is frequently set to it in hymn books, is a superb tune for the hymn, but, like *St. Columba*, it is decidedly awkward for children of Primary School age. The unusual sweep of the tune (two notes over an octave in the first line), the delightful but dangerous jumps which occur every now and again, and the clusters of two short notes sung to one syllable, all combine to make this quite a technical problem for children to sing. The moral of all this is, that one should never come to think of a particular hymn as having to be sung to one particular tune and no other.

Quite apart from the different stages of musical experience to which I have already referred, different tunes are appropriate at different stages of religious experience, as indeed the use of these three tunes to *The God of Love* shows. It will be agreed that the essential feeling of the first verse of this hymn is expressed in the third line "He is mine and I am His". It will be noted that *St. Flavian* gives a higher note to "mine" than "He" and to "His" than "I", with the result that the emphasis of the line is "He is *mine* and I am *His*"; *i.e.*, the point stressed is the possession of another being within one's own. In *St. Columba* the pitch of the notes, and consequently the emphasis, runs the other way, "*He* is mine and *I* am his"; *i.e.*, the spirit behind this rendering is the surrender of oneself to a being other than one's own. Finally, in *University*, the emphasis is in accordance with the literary device called by the Greeks *chiasmus*, "*He* is mine and I am *His*", so that the spirit which this last tune expresses is one of being completely surrounded and engulfed by Him. Many other examples will occur to the reader of the fresh light

that a new tune will throw upon a hymn. I may mention in passing, the use in *Songs of Praise* of the lilting English folk tune to *I think when I read*, and the different tunes that have been used to *In heavenly love abiding*.

Of course there can and should be other types of music provided in connexion with school worship besides hymns. So far as chanting is concerned, however, I feel that the subtlety of prose rhythm is too elaborate for a large body of children to reproduce *worshipfully*. By all means let a picked few sing chants in appropriate circumstances from time to time, but by far the greater part of any school assembly should be made up of activities involving the participation of everyone.

It is more satisfactory if the work of the picked few takes the form of a short cantata or something similar, with which is linked simple, hymn-like singing by the whole body of children. A programme of this sort is particularly suitable at Christmas, when in between the more elaborate carol settings sung by a special choir, the whole school can join in the simple traditional melodies. Bach's use of chorals can also be very helpful, *e.g.*, in a version of Parts I and II of his Christmas Oratorio which will shortly be published for female voices, the melody line of the chorals can be most appropriately sung by the whole school in between the airs and choruses sung by a special choir.

So far I have mentioned only music which has been set to words; I should like to conclude by a brief reference to music without words, whether used *e.g.*, in voluntaries, as part of a religious service or performance, or entirely separately in the course of the school's curriculum. The serenity which clings around much of what I may call classical music can have a very powerful influence in the religious education of children. In speaking of serenity and classical music I refer to the fact that, generally speaking, the texture of compositions of the 17th and the greater part of the 18th century is much more uniform than that of works written in the romantic period or later. To take an example, the mood and range of practically any movement by Bach can be deduced from the opening bar; *e.g.*, *Jesu, Joy of Man's Desiring*. Romantics like Beethoven and later composers are essentially concerned with the juxtaposition of contrasting moods and ideas, *e.g.*, the beginning of the Eroica Symphony, when a soft opening theme is preceded by two *fortissimo* chords. It is essential in any religious ceremony that there should be a calm serenity in the music that is played which gives a permanency, a stability, to the feelings of those present. And in a slow movement by Bach, such as in the D Minor double violin concerto, or the final sarabande-like chorus of the *Matthew Passion*, that serenity is found in very great measure.

INTERNATIONAL EDUCATION

An English Course in Hamburg

R. M. T. KNEEBONE M.A., Headmaster of Beckfield County Secondary Modern School, York

Mr. Kneebone has recently taken part in an Anglo-German Course held in Hamburg, for teachers of English in primary, secondary modern and secondary technical schools. (The terms are not, of course, equivalent, but will give English readers some idea of the kind of schools concerned.)

He has sent us the following account of the course, which was sponsored by the German Section of the Foreign Office as part of their Cultural Relations scheme, and was designed to give background information about post-war Britain, with special reference to the educational system, and material for English teaching in German schools.

It will be of particular interest to those taking part in meetings with people from other countries and to teachers of foreign languages in all types of secondary schools.—*Editor.*

The course was held in a camp school near the airport. There were four members of the English team, all strange to each other. On the journey from Harwich the headmistress of a Girls' Independent School, the Training College lecturer and the heads of a Boys' Grammar and of a Mixed Secondary Modern School made some beginning by

accepting responsibility for introducing subjects, but wisely preferred to see the group before making final preparations.

The German inspectress who met them is noted for her friendliness, enthusiasm for and understanding of the English way of life. She asked the thirty German teachers who had volunteered for the course during their Easter holiday to introduce themselves. They spoke of their schools, primary and central in type, in which they taught English, and of their own background. Several were refugees. All had a good English vocabulary but lacked experience in continuous speech, except for a few who, either as prisoners of war or through relatives or part-time employment, had visited this country.

A residential course is hard work. Morning lectures on the structure of our educational system, our social and political inheritance and the teaching of English were followed by group discussions that might lead by various paths to enquiries about the Royal Family or shrewd questions on public schools or the social services, with difficulties of pronunciation or interpretation a ready source of instruction and wonderment at all times.

Afternoons began with comprehension exercises based on historical newspapers, so that the Great Fire of London or the battle of Culloden acquired new importance for the English team. Each group worked through its programme of reading, word study, paraphrase, precis and allied exercises. Then after a short break seven teams rehearsed modern one-act plays until, towards the end of the fortnight, such proficiency existed as to make it possible to give performances, book in hand, but with make-up and costume, on an improvised stage in the common room, before an audience as critically alert for mispronunciation as for gesture, timing and movement. The results were delightful. They were occasionally funny and always high-intentioned, for no pains were spared in mastering expression, interpreting spirit or finding appropriate properties.

Informal conversations begun at meal-times developed as good-natured gossip on family, literary and educational affairs. In addition the evenings offered scope for word games, singing and dancing, and for reading children's exercises and letters and the various educational publications grouped for interest on tables and made available throughout the course. One-minute talks touched on holidays in North Wales and the Black Forest, and gave information on hens, pigs and musical instruments, and a study of colour. There was one story about a man who tried to go on "a down-rolling staircase up".

The pride in responsibility of class teachers, their annual holidays with forty children in their sole care, the delicate position of the headmaster, the political implications of choric speech—these grew from conversations to discussions in various corners of the common room until someone's insistence at the piano drew all together to sing *Strawberry Fair* or *Cockles and Mussels* to the last word of the last verse and beyond.

This word pattern was broken on one morning only, when films were shown. *Night Mail*, prefaced by a reading of Auden's poem at breakfast, a film on an approved school and another on the historical development of the English language offered new visual and aural opportunities and suggested a means of relaxation for lecturers on succeeding courses. The sound track of "Night Mail" was so worn as to be incomprehensible. The German teachers, noticeably more fluent and understanding as the course offered so much practice, were disappointed at their inability to pick up the conversations and explanations in the other clearer films. This led to appreciation of the carefully-enunciated, emphatic speech of the English team.

The final night brought together all members in an original play based on a true story told, during the course, of the history of an endowed school. The scenes were outlined in rehearsal but speech and action were left to be improvised by the German and English players. Freed from the tyranny of the prompt copy, invention flourished. One speech by a man invited to become Lord Mayor of London emphasised qualities

of humility and service to the community, in a way that would have distinguished any civic occasion. A Lord Mayor's Show, circling the common room in an astonishing display of costume, used masks made by German school children.

A final meal, farewell speeches, gifts and songs ended a strenuous and at times exhausting course. Whether in miming a cricket match or considering Plutarch, the presentation of the material was active, real and honest, true evidence of work done in English schools, and that of German teachers in schools operating a two-shift system with difficult educational and human problems to face. From such beginnings understanding grows. What the lecturer is, as well as what he says, matters there as here.

PSYCHOLOGY IN YOUTH LEADERSHIP TRAINING

Iris Royston Training Tutor, Part-time Training Course in Youth Leadership

IN his report on the Training Youth Workers, mentioned in the last issue of the *Bulletin*, Mr. David Sealey draws attention to the problems presented by the content of the psychology syllabus in the Youth Leadership Training Course. To plan a psychology syllabus consisting of twelve evening sessions for students taking a course in youth leadership is no easy task. Men and women who are prepared to sacrifice their free time in order to do a better job of leadership expect from such a course material which helps directly with the job. Past experience suggests that the inclusion of abstract psychological concepts should be avoided.

In order to do some further thinking about these problems a meeting was recently held at the Institute of Education between representatives of the West Riding Association of Girls' and Mixed Clubs, which included youth officers from the statutory authorities as well as voluntary workers, and a number of specialist visitors who were willing to give time and thought to this subject: these included the University Professor of Psychology and lecturers from the Departments of Education and Psychiatry, a Training College and the Institute of Education, all of whom had had special experience among young people.

Discussion centred in the following training syllabus proposed by the Training Committee:—

(i) The changing idea of adolescence
(ii) Membership of the group
  The family group
  The neighbourhood
  School
  Work
(iii) The fundamentals of the group
  Sanctions
  Leadership
  Conflict
  Changes
(iv) The awakening of religious insight

Practical Work

As an essential complement to this lecture work, it was planned that each student should be required to make a study of an adolescent. This would not be a "case" study, or necessarily a study of a "problem child". It would be essentially a piece of guided observation and interpretation. This study was to go on concurrently with the lecture course and the study of the adolescent would be in the light of these lectures.

These proposals were felt by some of the visitors to give too much emphasis to social psychology and insufficient attention to the individual. It was also felt that there was not sufficient regard for development of younger children, since it is there that the

roots of many adolescent problems lie. On the other hand it was pointed out that with such a limited time available it was a mistake to try to cover too much ground and that the intention had been to consider the individual in the setting of the group. Professor Meredith outlined an interesting experimental approach which avoided planning too rigid a syllabus and for which a point of departure could be made from known club problems; case histories could be considered and habits of psychological thinking could be developed, as different ways of looking at human problems were employed. He described how such a method had been tried with a group of Children's Officers in which case histories were prepared before each evening, and, after these were discussed, students produced examples of their own; thus the time was spent in discussion and co-operative thinking rather than in lectures. Another suggestion was that the first four evenings should be devoted to characteristic adjustments and that when students had an idea of what was normal, a start could be made in considering problems. A further alternative was to begin with the consideration of youth club groupings and then deal with other groupings, and with the individual, returning later to consider the youth group.

After considerable discussion, it was agreed that in order to get to know the students and the problems which confronted them in their work, some of the visiting specialists should meet for an evening of "Any Questions". This meeting of specialists and those working in the field roused a great deal of interest and it brought the voluntary and statutory members together in a mutual desire to understand each other's view-point so that the best contribution could be made to the training provided for youth leadership.

AN EDUCATIONAL HISTORY MUSEUM

W. E. Tate B.Litt., F.S.A.

RES ipsa loquitur; a thing itself can speak for itself, often much more eloquently than we teachers can speak for it. That is the justification of the School Museum, and it is also the reason why the University Education Department wishes to practise what it preaches. It has, therefore, lately set about the establishment of a modest museum collection of its own, bearing in the first place especially on the history of education throughout the three Ridings and in the Ainsty.

There were special reasons for the development of such a collection just at this juncture, for a time of change and transition, when old institutions are dying or being so remodelled and changed that their parents would hardly know them, is one when there is special danger of loss or dispersal or destruction not only of their archives but also of those other of their minor possessions which in new circumstances are no longer of immediate use. It is easy to forget that these may well be regarded as of value to the historian even nowadays, and of inestimable worth to his successors in future years, when R. A. Butler will seem as remote as Andrew Bell, and Robert Lowe almost as far off as William Lily.

It was in the years immediately following 1536 and 1539 that monastic houses were destroyed, often leaving little trace or record, and their archives burnt as waste paper, used to wrap candles, or boiled down to make glue. The efforts of historians throughout four succeeding centuries have only to a small extent repaired the damage done then. In more recent years, since the virtual abolition of the parish as a unit of local government in the years following 1834, parish records (and indeed other parochial properties of all kinds) were subjected to such cavalier treatment that by the time a policy of conservation was agreed upon in 1893, often there was very little left to be conserved. It would be distressing and discreditable if 7 & 8 Geo. VI c.31 were to have for the historian effects even remotely comparable with those of 27 Hen. VIII c.28 or 4 & 5 Wm. IV c.26.

In Yorkshire at any rate it is quite unnecessary for this to happen. For, while there are educational relics which the museum could never hope to acquire, or to accommodate if they should be offered to it (for example a Tudor flogging block, or a pair of Queen Anne charity school uniforms, much less an 1870 board school in mint condition), it can and will very gladly find room for lesser objects of educational interest.

The Department is building up, for example, a collection of portraits of founders, pious benefactors, distinguished headmasters and eminent *alumni* of Yorkshire schools of all kinds. It will not exclude from its portrait gallery such unworthies among our former colleagues as Mr. Wackford Squeers or Eugene Aram. The distinguished Old Boys should eventually make a very interesting collection indeed, ranging from Guy Fawkes, through Richard Bentley to such moderns as the Rt. Hon. Arthur Greenwood. It may well be that some local schools have eminent *alumni* of whom we do not know. In any instance of this kind the Department will be most grateful to have a note of name, date and school, with a reference to any portrait, in the school or elsewhere, and available for photographic copying.

It would very much like to acquire one or two more needlework samplers, especially such as are dated and marked as executed in Yorkshire schools. The museum contains no hornbook and it would like to have one. The Department would welcome further specimens of used school exercise books of all periods, especially of the seventeenth, eighteenth and early nineteenth centuries. So far the collection contains very little material bearing on the history of the School Boards locally, and it should have many more specimens of school board election literature.

Old school text books it does not want. But it would like more local school histories —whether those in separate bound volumes, or those entombed in back numbers of school magazines, etc.

It needs a photostat of an original bishop's or archbishop's licence to teach, issued to some Yorkshire schoolmaster before 1869. It wants also a specimen of the precious "parchment" certificate issued by My Lords and the Board to qualified teachers (in the Victorian period). It would be glad to have an example of the Royal Letter of Appointment from H.M. in Council "at our Court of St. James's" on which presumably much of the enormous prestige of H.M.I. has rested. It would like also one or two children's Leaving Certificates, and some speciments of the Diplomas and Certificates, issued by the Science and Art Department at South Kensington.

And here comes a rather delicate point. The Department is not, of course, an "authorised repository", approved by the Master of the Rolls for the deposit of archives which have gone astray in the course of the centuries. But if any reader has archival material we will very gladly have a photostat made of it, and return to its present owner or custodian the original with a spare print of the photostat. Any such records, while we have them, are kept in the University strong room, and every possible assurance is given of their safe custody and their prompt return. Actually we do not care to assume responsibility for the custody of *originalia* unless this is unavoidable. If the owner or custodian of the documents is able to bring them into Leeds we can, if we are advised beforehand, arrange for the negative photostats to be made while he waits, so that the archives need never leave his possession. The positive prints may then be readily made later, at the convenience of the University Photographic Department.

Finally, the collections in which we are trying to interest the reader are not being made in order to be bundled away into a library or strongroom. They are here for use, and any accredited teacher or research worker—whether or not a member of the University—is very heartily welcome to use them.

The Department feels that the move it has made is rather overdue than premature. Without the sympathy and practical help of teachers and scholars in Yorkshire the

project can be only partially successful. With their active co-operation it is hoped it may become a really useful addition to the means of and facilities for advanced study locally.

Inquiries and offers of help should be addressed to:—
Professor R. N. Armfelt,
Department of Education,
The University,
Leeds, 2.

All letters will be received gratefully, acknowledged immediately, and dealt with promptly.

FROM THE COLLEGES

THE two new colleges in the Institute's area have now completed their first term, and have sent us the following accounts of their first days.

The Ilkley College provides a three year course for students training to be teachers of Domestic Science. The Margaret McMillan Memorial College at Bradford is especially concerned with the training of teachers for Infant and Nursery Schools.

Ilkley College of Housecraft

The forty-one students received into this new College one cold afternoon in January might have been excused some misgivings. Their reception was literally, if not figuratively, chilly. Snow-streaked moors shed gloom upon grey turrets that in turn frowned darkly at the lowering sky. The drive was littered with the dismal paraphernalia of the building-contractor: cement-mixers, barrows, picks and spades, an old bath or two, rusty and coated with ice. Indoors, the desolation was appalling. From innumerable windowless and doorless apertures, icy draughts swept the corridors as one picked a way among ladders, carpenters' benches and heaps of fallen plaster. Apart from the residential wing, there were but three oases in this wilderness: the bursar's office, the staff-room, and the library, which had been arranged to serve as temporary dining-hall and students' common-room, with rugs hastily thrown over bare floor-boards, a circle of chairs, a bowl of flowers and a roaring fire to lend a specious air of comfort.

Now that some semblance of order has been established in kitchens and dining-hall and our lectures are less frequently disturbed by whistling workmen and persistent hammers, it is possible to take stock of the situation with a less jaundiced eye, and to discover its advantages. These students inherit nothing: neither tradition nor ordered arrangement; what they would have they must help to create, and, if it is a fine thing to inherit traditions, surely it is still finer to create them.

Especially in a housecraft college is this experience valuable. Week by week, as equipment arrives for housecraft, cookery and needlework rooms, the students witness the procedure of orderly arrangement, installation, storage and inventory-making. From the first week of residence they had had practical experience of the designing, cutting out and machining of household cloths and covers. They are now watching the delivery of library furnishings and equipment, and have the opportunity to help with the classification and cataloguing of books.

From the beginning it has been the aim of those who have shared in the task of establishment to create a college with a bias towards art rather than science, and to give this bias by stressing the aesthetic approach to each subject in the teaching syllabus. Here again the furnishing of the College plays its part in the education of the student. Much thought has been devoted to the choice of colour, line and fabric. Stress has also

been laid upon the suitability of each article, from the point of view of height, shape and size, to the purpose for which it is designed. The fact that instruction has to be given while buildings, decorations and furnishings are still incomplete helps to make the student conscious of her surroundings and appreciative of the results of an aesthetic approach and economy in planning. Some of the College study-bedrooms, though occupied, still lacked at first bed-covers or rugs, thus giving the occupant a chance to share in the selection of colours. Five or six rooms are to be left unfurnished, with an allocation of funds to enable the students, as they gain experience, to purchase second-hand furniture and renovate it with fabrics which they themselves will select, bearing in mind the importance of colour, durability, design and suitability for purpose.

Extensive College grounds afford yet another opportunity. Only one gardener has so far been appointed, and it is hoped that the students, guided by members of the staff, may take up gardening as a hobby. Among many suggestions are an Elizabethan herb garden, herbaceous borders, rockeries and banks of irises and scarlet dogwood.

On the academic side, every effort is being made to bring the syllabus into line with the general aim. In English, for example, the students will cover a wide field in reading. They are to work on the principle of *je prends mes biens ou je les trouve*, and they will be encouraged to write well and to speak with clarity on those matters which appeal to them.

Margaret McMillan Memorial Training College

In the history of the Margaret McMillan Memorial Training College, 4-40 p.m., January 25th, 1952 will be an hour and a date to be remembered.

To the students who had travelled from all parts of the country it meant the end of a period of anxious waiting and eager anticipation, and the beginning of a great adventure. College life had begun.

To members of Staff it meant the end of a long and difficult period of preparation, bringing with it a feeling of relief and a sense of achievement but also the sudden realisation that something of profound significance was happening. As the students gathered round the glowing log fire in the entrance hall, the material problems of the past few months seemed to fade into the background and we were aware that Tong Hall was peopled with real live personalities. We were faced with a new beginning, fresh responsibilities and a great challenge for the future. The Margaret McMillan Memorial College was a living reality. The first students had arrived.

The simple but impressive opening ceremony took place the following morning, January 26th, 1952. The whole college family—lecturing staff, domestic staff and students assembled in the Green Lecture Room, where they were welcomed by Alderman Kathleen Chambers C.B.E., L.L.D., J.P., Chairman of the Bradford Education Committee, Mr. A. Spalding B.A., Director of Education for Bradford and Miss Miriam Lord O.B.E. an ardent supporter of nursery schools and a member of The Margaret McMillan Fellowship. All the three speakers spoke with conviction and sincerity on the work and influence of Margaret McMillan and inspired us all to aim at high ideals and a desire to create a College worthy of the great name it bears.

The College has opened with a group of 46 students, 40 resident and 6 day students. They were carefully selected from a large number of applicants and have brought to their work as Nursery-Infant Students a wide variety of interests and experience. They come from all over the country from Cornwall to Carlisle. Some have had nursery and teaching experience; others have worked in offices, shops, hospitals and libraries. Only twelve have come direct from school.

TDV İSAM
Kütüphanesi Arşivi
No 059-126/7

An introductory course for the first term consisting of lectures and tutorial discussions, in addition to visits to Nursery, Infant, Junior and Secondary Schools and to Parks, Factories, Art Galleries and Museums, was designed to give students a picture of home and school life and of social conditions and educational facilities in a large industrial city. The sequel to one of these visits revealed the impression made on a student from a rural district. A few days after the visit a large surprise parcel was delivered at a school in a very gloomy, congested area of the city. It contained spring flowers from Cornwall.

Limited accommodation for lectures has necessitated a very careful planning of time-table. Some lectures are held in Bradford at the Technical College, or at the Regional College of Art, and some at Tong Hall. During the summer it is hoped to make use of the lovely grounds at Tong Hall for outdoor activities in Physical Education, Art, Drama, Music and Nature Study.

Tong Hall will be the temporary home of the College until the new building is completed. No doubt country lovers will become warmly attached to it, but it has the disadvantage of being too small for our developing needs, and too remote from homes, schools and play centres, where our students will do much of their training; so progress on the foundation site of the new college at Trinity Road, Bradford, is eagerly watched and recorded.

BOOKS

Notes on Publications

Historical Association: *Modern British history* 1495-1939: *a short bibliography* (Helps for students of history No. 54: Philip, for the H.A., 2s. 6d.: 1s. 3d. to members)

This is a short annotated list of books, generally well-known, likely to be useful for secondary schools. After a general section, the period is covered in five divisions, ending with a short list of original authorities available in published form. There is an author index. "The main emphasis is on political and constitutional history, although due weight is given throughout to the religious, social and economic aspects".

Author, title and date and place of publication are given for each item, but not the publisher or price.

Kent Education Committee: *Catalogues of recommended books and publications for grammar, technical and secondary schools*

English (62 pp.)

Domestic science, health and physical education (20 pp.).

Catalogues of recommended books and publications for primary schools

English (41 pp.).

(County Education Offices, Springfield, Maidstone 1951-52 3s. 6d.: 1s. 6d.: 3s.)

These three catalogues are part of a series of twelve projected by the Kent Education Committee, and supplements and new editions will keep them up to date. The foreword declares that "only those books which can be positively and generally recommended for school use are to be included. . . . . The catalogues are selective and purely advisory and in no way prescriptive". Each catalogue gives full details, including prices of the books, and is classified under broad and intelligible headings. They should be most useful to teachers and school librarians.

E.R.S.F.

Printed by William Stevens, Limited, Yorkshire Printing Works, Hull Road, York.

CROWN COPYRIGHT RESERVED

LONDON : PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE
To be purchased directly from H.M. Stationery Office at the following addresses :
York House, Kingsway, London, W.C.2 ; 13a Castle Street, Edinburgh 2 ;
39 King Street, Manchester 2 ; 2 Edmund Street, Birmingham 3 ;
1 St. Andrew's Crescent, Cardiff ; Tower Lane, Bristol 1 ;
80 Chichester Street, Belfast
OR THROUGH ANY BOOKSELLER
1949

Price **1s. 0d.** net

Printed under the authority of His Majesty's Stationery Office by
McCorquodale & Co. Ltd., London, S.E.1

S.O. Code No 27-291-1*.

building bulletin

MINISTRY OF EDUCATION

October 1949

TDV İSAM
Kütüphanesi Arşivi
No 059-126/8

1

NEW PRIMARY SCHOOLS

BUILDING BULLETIN No. 1

October 1949

Contents

TDV İSAM
Kütüphanesi Arşivi
No 059-126/8

November, 1949

Note

This Bulletin was written before the revision of regulations 6, 7 and 8 of the Building Regulations and the issue of Circular 209*. In general the suggestions in the Bulletin do not need amendment on this account (indeed they should help authorities to meet the requirements of the Circular), but where there are any discrepancies the revised regulations and the Circular should be understood as superseding the Bulletin. The following are points to be noted :—

Page 35 : Sanitary Offices. There is an entirely new scale of provision.

Page 35 : Washbasins. The scale of provision has been modified.

Page 38 : Staff Rooms. It is no longer prescribed that the head teacher should have a separate cloakroom, washbasin and w.c. The aim should be to make sanitary and washing provision for all teaching staff and visitors in one place in the school as compactly and economically as possible.

Where all the staff and pupils are of one sex, provision will need to be made for the occasional visitor of the opposite sex. This can be done by planning the staff accommodation in such a way that one of the w.c's and washbasins can be reached without passing through the cloak space and lavatory.

Page 38 : Doctor's Room. The requirement that there should be a w.c. for use in connection with the doctor's room should be met by planning the room conveniently in relation to the staff sanitary accommodation, and not by providing a special closet.

A separate rest room should not now be provided, but it is suggested that the doctor's room might be furnished so that it would also be a comfortable rest room.

Page 38 : Waiting Space. The provision of special waiting space cannot now be considered, but parents will be present during inspections and will need seats, either in part of the circulation space or in a room normally used for other purposes which is near the doctor's room.

Page 39 : Kitchen and Ancillary Rooms. It is essential that all possible economies should be made by the careful use of both space and equipment.

Page 42 : Sculpture and Mural Decoration. In present circumstances, expenditure on sculpture and mural decoration must be kept to a minimum.

Page 43 : Cost and Plan Analysis. The figure of £180 mentioned as a reasonable cost per head has now been superseded by the "ceiling" figure of £170 per place imposed in Circular 209.

The method of calculating the cost per place shown in this Bulletin has been superseded by that in Appendix A of Circular 209. The difference is that now the *nett cost* (*that is, the cost of the building*) *should include the cost of all excavation and foundation work in the building.*

Page 46 : Appendix 2. The following points should be noted in the example of a plan analysis shown in this Appendix :—

(1) the total area per child (62 sq. ft.) exceeds the 55 sq. ft. suggested in Circular 209 for this type and size of school ;

(2) the areas are calculated from dimensions measured to "the centre lines of external walls . . ." In Appendix A of Circular 209, it is stated "*Superficial area. This should be measured to the internal surfaces of exterior walls.*"

Ministry of Education

* Ministry of Education Circular No. 209, "Capital Investment in 1950." (H.M. Stationery Office. 3d.)

Foreword

This bulletin is a new venture. It has been obvious for some time that there is a need for guidance on educational building matters which is less formal than regulations, circulars or administrative memoranda, and which will reach a wider audience than official letters. The bulletin is designed to meet this need. It does not take the place of more formal documents such as the Building Regulations or the Memorandum about them, but, being of a more flexible and empirical character, it can take account, in a way which they cannot, of changing ideas and techniques. As the views of its authors evolve by discussion between their readers and themselves and by experience gained " on the ground," each subject covered by the bulletin will be reviewed.

We hope that architects will find the bulletin useful. But it will not serve its purpose unless it evokes the interest of all those whom architects regard as their clients. All experience since the war suggests that good schools can be speedily and economically built only if there is the closest co-operation between everybody concerned.

This first number deals with the primary school : it outlines recent trends in primary education and tries to describe their architectural implications. In later numbers we propose to cover in more detail specific problems such as heating, lighting, building techniques, cost and plan analysis. The next main subject will be the secondary school, a study of which is now in progress.

A casual reader might gain the impression that the quality of building and equipment discussed in this number can be provided only at considerable expense. Post-war experience has, however, already proved that this is not necessarily so. Where real skill has been brought to bear on problems of design, high standards have been accompanied by relatively low costs. A principal aim of the bulletin is to review means by which this process can be continued, with particular emphasis on the progressive lowering of costs. In this number cost is discussed in some detail on page 43 and more information will be circulated as soon as a comprehensive investigation on the subject which the Ministry has in hand is further advanced.

In preparing this number we have had considerable help from teachers and from officers of local education authorities, to whom we are most grateful.

Any comments on the bulletin or suggestions about future numbers will be welcomed. Readers are asked to address any letters to The Editor, THE BUILDING BULLETIN, Ministry of Education, Curzon Street House, Curzon Street, W.1.

NEW PRIMARY SCHOOLS

INTRODUCTION

The aim of this bulletin

The aim of this bulletin is three-fold :—

To attempt to review the requirements of primary schools as a whole ; what is needed educationally, in terms of space, fittings and furniture ; and in terms of physical conditions such as heating, lighting and general amenity.

To consider how to translate these requirements into school design.

To encourage, simultaneously, the raising of standards and the reduction of cost, through skill in spatial design, structural technique and administrative organisation.

Children are the basis of school design

The school is no longer merely an institution for compulsory instruction. As the Report of the Consultative Committee on the Primary School* says : " The schools whose first intention was to teach children how to read have . . . been compelled to broaden their aims until it might now be said that they have to teach children how to live." The school environment has become an all-important part of education ; every detail of the school will have its effect on the inhabitants, and everything that goes on in the school will contribute to the education of the children—not only in the class spaces but throughout the whole school.

How can the architect make his best contribution to the creation of this environment ?

The basis of school design is not only a schedule of areas and building regulations, but the needs and activities of growing children and of their teachers.

For the youngest children school is a new experience ; these children are not yet used to abrupt change, but come straight from home, where, if it is a good home, they have security and protection. Therefore the school needs to provide a sense of security, protection and unity which is the same in kind as that of the good home.

Children of primary school age are growing quickly. Therefore they need plenty of fresh air, sunshine, light, warmth and good food.

They delight in free movement, and are active, inquisitive, and often boisterous and noisy. Therefore the school needs to provide uncrowded space, and opportunities for making and for doing.

They enjoy doing things that will often make them dirty and messy. Therefore there should be opportunities which encourage them to get clean again.

They sometimes like to be quiet. Therefore the school should provide the right kind of spaces in which small groups of children may rest quietly.

They are intensely interested in the material objects around them. Therefore they should be surrounded with good colours, shapes, forms and textures, and will thus grow to understand and appreciate beauty and simplicity.

Co-operation between architects and educators

A very large school building programme is under way. We need schools and we need them quickly, but they must be good ones : this is the challenge which faces architects and educators to-day.

Some of the post-war schools are beginning to meet the requirements of new educational thinking, but some are unimaginative and inefficient. Nor are the architects always entirely to blame for this, for their clients have sometimes been too easily satisfied, and have

*H.M.S.O., 1931 (Reprinted 1948)—2/6d. net. (2s. 8d. post free.)

not always thought out just what sort of a school they wanted, nor briefed their architects in sufficient detail. The Ministry's Regulations do no more than lay down guiding principles and minimum areas, and they must be supplemented by a full discussion of local requirements for every project of school building.

The first point to be made, therefore, is that there needs to be the *closest co-operation between the people who design the schools on the one hand, and the people who are to live in them and are responsible for their organisation on the other hand*—the teachers, administrators, inspectors, health experts, parents and the children themselves. The architects will therefore necessarily visit exisitng schools, talk with parent-teacher associations, and confer frequently with those who guide the building programme. There will be no final and ready-made solution, but rather a continuous process of trial and error, of exploration and experiment. Authorities with a large educational building programme covering a number of years will be able to incorporate in successive schools the experience gained in those already completed. Each new school should stimulate constructive criticism both by architects and by teachers and administrators.

Teachers have a particularly important part to play ; they are some of the people whose work will be most closely affected by the school premises, and it is essential that their ideas should be expressed, and understood by the architects. They will think of new and different ways of using space to the best educational advantage, and will, in their turn, throw the challenge back to the designers. It is the architect's job to assimilate all these varying, and sometimes conflicting, requirements, to co-ordinate them with functional standards and with structural economy, and to translate them into space that will encourage its fullest educational use.

Any solutions which tend towards the standardisation of plan forms should be viewed critically. A good school design does not consist of standard " blocks," such as a classroom block, a canteen block, or a lavatory block. This approach so often leads to a layout consisting of monotonous rows of parallel wings. This may have been inevitable at a time of emergency when only standard hutting was available ; good school architecture suitable for present day requirements is, however, possible under present day conditions.

To achieve the organic environment demanded by the new conception of education a wide variety of space arrangements has to be employed, wider certainly than that in most existing schools. The question is : how to secure this variety, not for a single school but for whole programmes of schools, in face often of a shortage of technical manpower and building labour ? This is too large a subject for this bulletin, but it seems certain that traditional methods of construction, however suitable in some areas, cannot provide a general solution. The need, then, is for new techniques, flexible enough to allow freedom in both plan and volume, to meet the requirements developed in this bulletin.

Standardisation will be necessary, not of plan forms, but of structural components, such as beams, wall units, windows. And these components will have to be so designed that they can be assembled quickly on the site by a small labour force. Some work in this direction has already been done ; but more must be done, and done quickly, if the concurrent problems of quality, quantity, speed and economy are to be solved.

GENERAL SPACE REQUIREMENTS

The spaces required in primary schools can, very broadly, be divided into three main categories :—

(1) Those spaces which are common, or shared by several or all class groups of children.

They include most of the garden and outdoor play spaces, the entrance space, the hall, the dining room (where one is provided), and the circulation areas.

(2) Those spaces which are special to individual class groups of children.

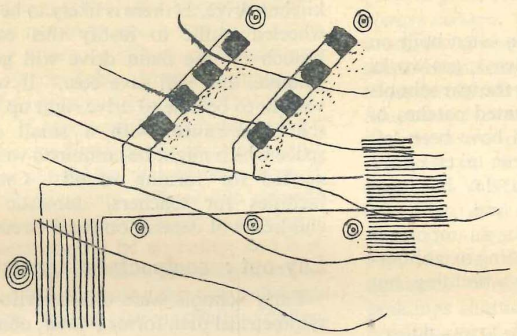
They include the class spaces, each the "home" of a particular group of children, with perhaps a part of the garden to be used as an extension of the class space ; and the children's coat-hanging and sanitary accommodation (if these are dispersed and not centralised).

(3) Those spaces which are concerned with the organisation and maintenance of the school. They include accommodation for the teaching staff, for medical inspection, stock and cleaning equipment ; the kitchen with its ancillary rooms and the boiler house.

The many and variable local conditions make it undesirable, and even impossible, to give specific arrangements of these areas, but before discussing each of them in greater detail, it may be helpful, at the risk of over-simplification, to note these general principles :

The common, or shared, spaces—the entrance space, the hall and the dining room—are the centre of the life of the whole school, and should be expressed as such architecturally, with the entrance as the space from which all other areas are accessible. The class spaces, and their ancillary rooms, should be grouped about this common centre, avoiding long, unbroken lengths of corridor, but providing the easiest flow of circulation between all parts of the building. (See Diagram No. 1.) A school, like the human body, is an organism whose separate parts should be in proper relation to the whole, with all its limbs in proportion.

THIS DIAGRAM IS SYMBOLIC OF MANY SCHOOL BUILDINGS WHERE NEITHER EDUCATIONAL IDEAS NOR THE QUALITIES OF A HUMAN ENVIRONMENT HAVE BEEN CLEARLY EXPRESSED.



THIS KIND OF ARRANGEMENT LIMITS ARCHITECTURAL EXPRESSION AND IS UNADAPTABLE TO EDUCATIONAL IDEAS AND TO THE VARYING CONDITIONS OF SUN, VIEW, AND CONTOURS.

THERE ARE BROADLY TWO KINDS OF SPACES IN A PRIMARY SCHOOL, THE COMMON CENTRE SHARED BY ALL CLASS GROUPS AND THOSE WHICH ARE FOR INDIVIDUAL CLASS GROUPS.

THE HEART OF THE SCHOOL IS THE COMMON CENTRE OFF WHICH THE LIMBS (CLASS SPACES) SHOULD BRANCH

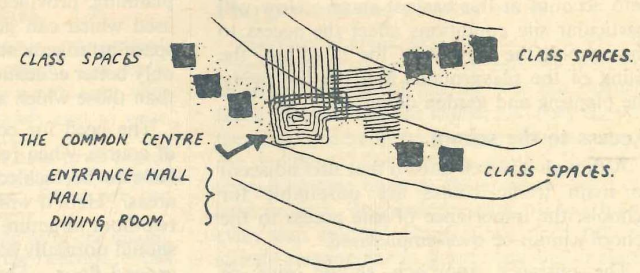


DIAGRAM. 1.

THIS CONCEPT IS CONDUCIVE TO GREATER ARCHITECTURAL FREEDOM. IN THE COMMON CENTRE EXCITING SPATIAL ARRANGEMENTS ARE POSSIBLE IN THE CLASS SPACES AN INDIVIDUAL AND DOMESTIC CHARACTER IS NEEDED THE TYPE OF STRUCTURE SHOULD BE CONDITIONED LARGELY BY THESE BROAD EDUCATIONAL REQUIREMENTS.

THE SITE

The school environment

The earliest schools were too often built on bits of land backing on to railways, gas-works or noisy yards ; and even since the war schools have had to be sited on unwanted patches of land on housing estates which have been left over after the best sites have been taken up for houses. But the school of to-day has considerable social significance and, with its increased site area, must become an important and integral part of its surrounding neighbourhood. A school is not merely a building, but a part of a wider environment.

What conditions will make this possible ?

In the first place it is important that any panel concerned with the acquisition of new sites should include the architect responsible for the design of the schools to be built on them. He alone can weigh up the requirements of the school with the conditions of the site, to determine if the two can be balanced.

Such problems as drainage, services, soil-bearing capacities, cannot be discussed here, but it may be helpful to consider briefly a few of the other factors which have to be taken into account at this earliest stage. How will particular site conditions affect the access to the school, the lay-out of the buildings, the siting of the playgrounds and playing fields, the planting and garden design ?

Access to the school

Although it is well known that sites adjacent to main traffic routes are unsuitable for schools, the importance of safe access to the school cannot be over-emphasised.

The entrance approach should give as generous a welcome to the school as possible. Even in the most recent schools it is common to find that the drive squeezes into the site through a bottle-neck between adjoining properties. This ought to be avoided. It is seldom necessary to have an entirely separate kitchen drive, as there is likely to be insufficient wheeled traffic to justify this expense. A branch off the main drive will generally be suitable, and will save cost. It will be convenient to be able to drive right up to the main school entrance, with a small car-parking space which might be combined with the space needed for turning round. Cycle storage facilities for teachers, domestic staff and children will depend on local circumstances.

Lay-out : compactness versus "sprawl"

Early schools were characterised by tight, symmetrical plan forms ; later, considerations of health and hygiene resulted in more open, but still rigid institutional planning. Many recent schools, however, have tended to swing right over to very straggling lay-outs, covering a high proportion of the site area with a monotonous repetition of elongated wings. Often a preconceived idea of a school plan over-rides the individual conditions of each particular site and any interesting natural features it may have. There are many opportunities to design really fine schools, from a spatial point of view, by compact planning, provided that a structural system is used which can give variety and freedom of space arrangement. Such schools can be not only better educationally, but cheaper to build than those which sprawl lankily over the site.

The need for compactness becomes acute, of course, when really difficult site conditions have to be tackled in closely built-up urban areas. Here it will be necessary to consider a two-floor structure for juniors, though infants should normally have their class spaces on the ground floor. There are positive advantages in two-floor schools, including possible economies of excavation costs, particularly on sloping sites, provided that certain conditions of lighting and ventilation are fulfilled. For instance, it may be possible to achieve these required standards by reducing the horizontal

circulation area quite considerably, relying more on vertical circulation.

In this connection the need for keeping down the size of primary schools must be emphasised. It is desirable not to exceed a two-form entry school, either junior or infant, unless circumstances make it inevitable. In no circumstances should a primary school be larger than three-form entry. If accommodation is needed for more than a one-form entry of infants and juniors, there should be two schools, even if they share the same site. These two schools need not necessarily be combined in one large building ; each should be an entity, and it is very probable that a better planning solution will be found by separating the two buildings entirely, each having its particular design problems.*

Lay-out in relation to contours, view and sun

How best can the school, by sensitive modelling to the contours, become a part of the landscape, sitting down, as it were, as if it belonged ?

Flat sites, though the easiest to manage, are not necessarily the most interesting. Sloping sites, within reason, need not be avoided, though falls of more than one in twelve are likely to cause major site works.

The most satisfactory contour arrangement, and probably the most economical, is a gentle slope down to the south or south-east, with contours running approximately east to west. The least satisfactory is the reverse. Contours running in directions other than east to west will necessitate more intricate planning to achieve good orientation economically. It is always cheaper to build parallel to the contours, but if essential educational requirements are to be maintained on sites with difficult contours (which are bound to be frequent), an adaptable system of construction is called for in order to arrange the elements of the building not only to suit the contours but to take advantage both of the sun and the view (if there is one). Even on restricted sites every opportunity should be taken to make the most of any view beyond the boundaries, preferably in a southerly direction ; and at the worst the buildings should be placed to get the longest possible view across the site itself. Many school lay-outs only permit very small " internal " views between blocks, which often makes it quite impossible to be conscious of the general setting in relation to the surroundings or even to the sun. (See Diagram No. 2.)

It follows from this discussion that it is essential, before starting any sketch design, to have full knowledge of the conditions of the site and its surroundings, and a survey showing contours at intervals of a foot.

Playgrounds and playing fields

Playground areas need to be easily accessible from the class spaces and the hall, but planned so that the noise of playing will not disturb those who may still be inside, and they should therefore generally be at some distance from the building. On sloping sites it may not always be easy to fit in the areas required on level ground. It should be remembered, however, that infants' playgrounds need not be strictly rectangular in shape, and that a slope of up to about 1 in 40 can be tolerated, provided that the surface is even. Juniors will need rectangular playgrounds in order to provide pitches for organised games.

Playing fields on sloping sites may present a more serious problem. Here the pitches for

* The kitchen, which would have to be shared by both schools, could be incorporated in either one or other of the buildings. There are two alternatives for the dining rooms :

(1) both dining rooms could be in one school, served direct from the kitchen ; this would mean that one group of children would have to walk over from the adjoining school, and simple coat-hanging space would be needed unless there was a covered way,

(2) each school could have its own dining room, and meals could be taken in containers to one of them.

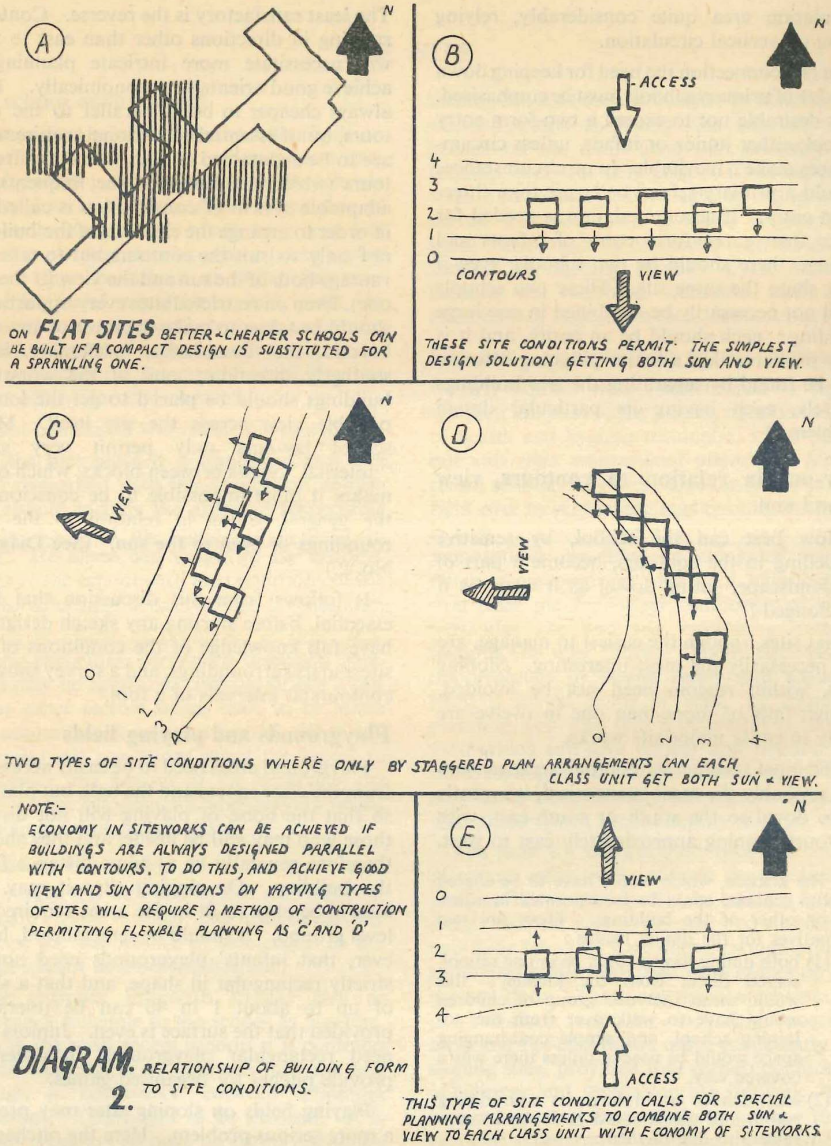


DIAGRAM 2. RELATIONSHIP OF BUILDING FORM TO SITE CONDITIONS.

organised games need to be as level as possible, and will range from 60 × 30 yards up to 80 × 50 yards. (A suggested allocation of pitches for schools of one, two or three-form entry is shown in Appendix 1.) In mixed schools it is usual for boys and girls to be playing simultaneously, though on separate pitches. In some built-up areas it may not even be possible to include the playing field as part of the school site.

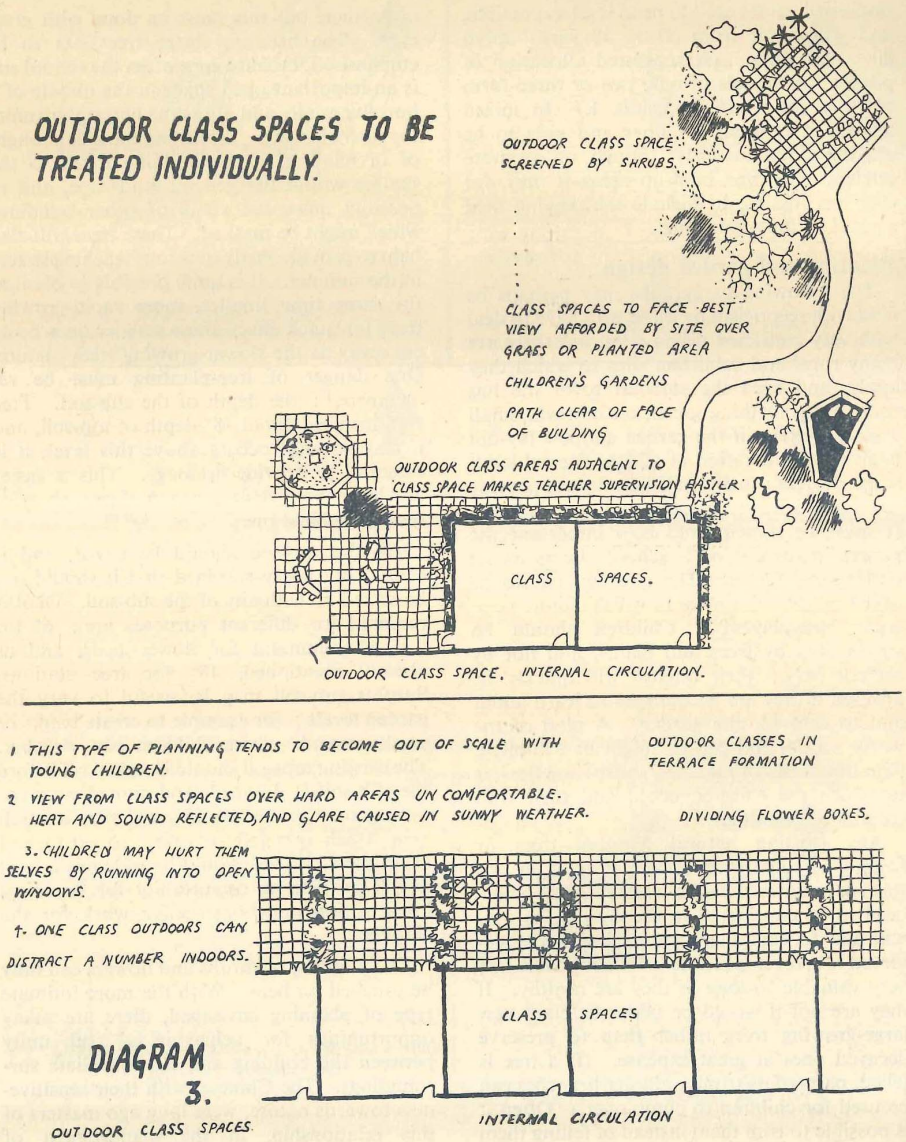
Planting and garden design

The following paragraphs may perhaps be read with scepticism by those who have to deal with very restricted urban sites, but there are many rural and suburban sites to which they apply, and even the smallest town site has room for something green, on however small a scale. Often, if the garden and site lay-out is given consideration at all, the formal landscape devices usually relied on do not provide the right kind of background for children. It must be remembered how important the garden treatment of a school site is as an educational factor. The question has to be asked : " Is this a place in which children can enjoy themselves ? " Children should be surrounded by trees and plants, and not by asphalt only ; their interest will quickly be aroused if they are encouraged to learn about and to care for the garden. A plan of the whole school and garden might be exhibited, with the names of the trees, shrubs and flowers to which the children could add their own records of planting.

Any existing natural features—trees or hedges, irregularities of the ground in the form of hollows or banks, a stream or a pond—need to be considered in the lay-out, as they will add to character, and ought to be preserved wherever possible. Existing trees are very valuable so long as they are healthy. If they are not it would be better to plant new large-growing trees rather than to preserve decayed ones at great expense. (If a tree is felled, parts of its trunk or larger branches can be used for children to climb over.) Often it is possible to trim them instead of felling them altogether, but this must be done with great care. The need for large trees has to be emphasised, because very often the school site is an important open space in the middle of a housing estate, and offers the best opportunity for such planting. Tree siting must be thought of in relation to the building itself, to the skyline within the general landscape, and to possibly unwanted views of other buildings which might be masked. These trees will also help to provide shady out-door teaching spaces in the summer. It is quite possible to plant at the same time smaller, more rapid-growing trees for quick effect, these smaller ones being cut away as the slower-growing trees mature. One danger of tree-planting must be remembered : the depth of the sub-soil. Tree stations need about 18″ depth of top-soil, and if clay sub-soil occurs above this level, it is essential to provide drainage. This is easier and less expensive for a group of trees than for several isolated ones.

All the top-soil should be saved, and it should be clearly specified that it should not be mixed up with any of the sub-soil. Depths required for different purposes are : 6″ for turf, 9″ minimum for flower beds, and as already mentioned, 18″ for tree stations. Surplus sub-soil may be useful to vary the garden levels ; for example to create banks or small mounds where children can clamber. The existing top-soil should be taken off before the sub-soil is dumped, and spread over the top again. Sometimes in rural sites a small area which was left to revert to scrub and small seedling trees would be welcomed, as it would provide an opportunity for botanical investigation and constructive work for the children.

The planting of shrubs and flowers can only be touched on here. With the more intimate type of planning envisaged, there are many opportunities for achieving a real unity between the building and its immediate surroundings. The Chinese, with their sensitiveness towards nature, were long ago masters of this relationship, in the management of



contours, of paving and of water. Where there are paved areas near the building there should always be planting to break them up and prevent hard monotony. Some permanent shrubs and herbaceous planting could be provided at the outset, leaving gaps for bulbs and bedding to encourage the initiative of the children and teachers. If the infants' class spaces are extended into the garden in the form of small paved areas, the siting and design need careful consideration. An unbroken terrace formation is seldom the best solution, even if sub-divided by screens of planting, mainly because the hard surface throws back heat and sound, and in bright weather is glaring and uncomfortable to look out upon. Although supervision from within the room is certainly easier when the paved area is close to the building, it may sometimes be possible to move it away a little, with a wide dry path leading to it past interesting bits of planting, or perhaps a pond or a sandpit. (See Diagram No. 3.)

The area for children's gardens should also be selected at the outset, in a sheltered, sunny situation, but the details should be left to the gardeners themselves.

Flower beds close to the building are valuable (provided that space is left for the window-cleaners to operate and that playgrounds are sited away from the buildings), not only because they help to unite the building with the garden—specially with windows to the ground—but because they prevent the danger of children knocking into low windows when open. Beds in this position may, however, affect foundation levels because of the 9″ minimum depth of top-soil required. This is a simple matter if considered in the first place, but might cause trouble if left too late.

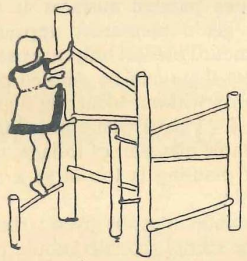
The choice and quantity of wall shrubs and creepers must depend on the colour and texture of the walls. Technical limitations and the present comparatively small choice of external walling materials severely limit the scope of exterior colour as compared with what can be done inside the building. Where a variety of materials such as brick, concrete, and various painted surfaces is used, it is easier to get a pleasanter appearance than where standard precast units are used throughout (unless these can be painted or rendered satisfactorily without incurring high maintenance costs). This is where planting can help, but the whole question of foliage, texture and colour of planting is too large a subject for this bulletin.

One reminder must be given : that maintenance of the school grounds should be borne in mind when deciding, for example, on angles of grass banks which have to be mown (15° is the maximum for large mowing machines) or on strips of grass which may be too narrow for the school mower. A store for garden tools will be needed, and an outside tap for watering.

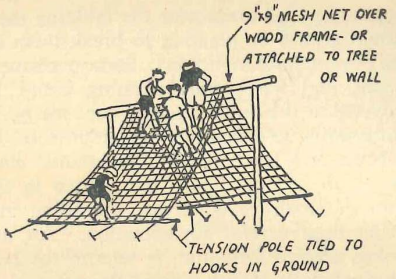
Play equipment

Great pleasure can be given by cheap and simple play equipment, so long as it is chosen with imagination, soundly constructed and securely fixed : an old cart or lorry, brightly painted ; a couple of old tyres hung on to a branch of a tree to swing on ; a felled tree trunk of interesting shape to climb over. If a wall for ball games is not provided near the playground one will probably be found in a less suitable place. A swing, a rope ladder, a see-saw, a slide, a commando net are all popular, and it should be possible to provide at least some of these. The youngest children will enjoy a simple bank to roll down, or a low wall to balance on. (See Diagram No. 4.)

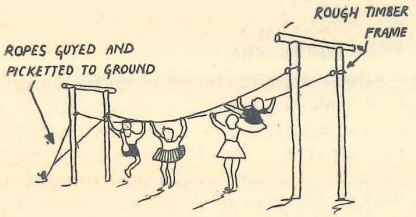
In addition to this play equipment, provision must be made for the small groups of children intent on personal activities and experiments of their own. Children need to live with and to watch other growing things—trees, flowers, animals, fishes, birds, insects. They should have small private gardens, perhaps a pond, perhaps some accommodation for animals. Also they will be making things with their hands : the youngest children should have some sand, and some may like to build with stones or bricks.



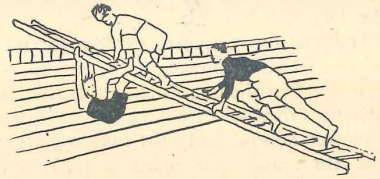
MOCK UP CLIMBING FRAMES.



COMMANDO NET



PARALLEL ROPES



USE OF LADDERS

1. IMPROVISATIONS ARE ENCOURAGED TO SUIT LOCAL CONDITIONS.
2. OLD TREE TRUNKS MAKE GOOD CLIMBING FRAMES.

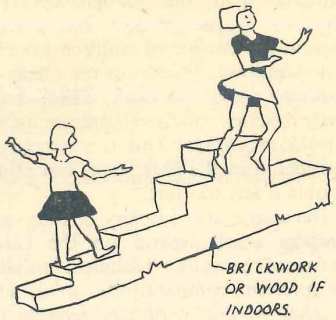


DIAGRAM. 4. PLAY EQUIPMENT.

BALANCING AND JUMPING WALL.

THE ENTRANCE SPACE

It generally used to be taken for granted that schools should have one entrance for grown-ups and separate, rather mean, entrances for boys and girls through sombre corridors flanked by cloakrooms and lavatories. But is it right to separate the children's entrance in this way from the " public " or " visitors " entrance ? Or should there be one main entrance for all with subsidiary ways out to link the garden with the different parts of the school ? If the school is really to belong to the children and teachers, surely they all have the right to come into their building through some reasonably dignified and gracious space. The entrances for the youngest children will be mentioned later, with the suggestion that these infants might perhaps be able to have their own self-contained accommodation with their own front doors. But if there is to be an entrance to serve the hall, it seems that this could be used daily by the older children, the staff and the visitors, and not just kept for special and rare occasions. Moreover, one spacious entrance is likely to be more useful, more aesthetically satisfying, and cheaper than several scattered smaller ones.

This entrance, the hall and the dining room are the centre of gravity of the whole school, and as they are the largest individual planning elements they are, if handled with imagination, capable of really interesting architectural treatment. Not only are they the social meeting places for the children but, with the growth of parent-teacher associations, parents will be taking an increasingly active interest in the school, and will mix with the children and teachers here. These functions suggest a certain amount of freedom of communication between all three spaces with sliding and glazed screens giving opportunities for a variety of uses, and exciting three-dimensional design. Also, if changes of level necessitated by site conditions can be arranged in this area, fine spatial effects can be achieved which would be lost if the change of level occurred in corridor links.

The entrance space can be designed to give a gracious and welcoming impression of the school when one first enters it. It should be immediately clear where the head teacher's room is, so that visitors will not have to wander helplessly in search of it. A brightly coloured plan of the whole school might be displayed so that all who enter will be able to find their way easily to the various parts.

In this space the architect is free to use his imagination without the restrictions of any narrow functional limitations. In addition to the general architectural treatment, which can be bold and arresting in colour and texture, the space will be brought to life by small groups of furniture, interesting interior planting arrangements, well designed notice and exhibition areas, gay patches of colour. Space for the free movement of large numbers of children should not, however, be restricted.

Flooring material will have to be selected with care on account of the very hard wear it will get. A non-slippery surface is needed, which can be easily cleaned. It will be necessary to provide good facilities for wiping dirty shoes at the entrance doors. Particularly on exposed sites, draught lobbies to main entrances are an asset.

THE HALL

Educational requirements

The hall in a primary school presents some problems for the designer because, as things are at present, it has to meet a good many different and sometimes conflicting needs. It is the only place in the school in which all the children can assemble (as, for instance, for religious worship), and it may be required on occasions to serve as a social meeting place for children and their parents. But above all, it is the place in which the children carry out their own activities. This will usually involve one class at a time, but this group of children will need space in which to move about freely on the floor, to sing, dance, play inventive games, and play musical instruments.

The hall may also have to serve the needs of adult groups out of school hours, when there is no other hall available in the neighbourhood. It is obvious that the adults will not want the same conditions as the children, and great care will be needed to see that their requirements do not overshadow those of the children for whom the hall is built in the first place. Additional accommodation may be required such as storage and coat-hanging space.

The architect must inevitably compromise to meet all the varying requirements of the school, but he can aim at a basic simplicity which will give the greatest freedom of use. This does not necessarily mean a bare uninteresting structure. On the contrary, there should be a welcoming atmosphere in this large room which indicates that it is the centre of the life of the school.

Before planning the shape and equipment of the hall, it is important to have a clear idea of the kind of things the children will do in it.

The younger the children, the less complicated is the space they need. Their most outstanding requirement is free space in which they can form their own groups, both when moving about or when making a semi-circle round a focal point (as, for instance, when they are listening to a teacher). Their physical training is not concerned with formations in straight lines ; they will run, play with hoops and balls, and try out their bodily powers in a variety of movements, including climbing, balancing and leaping. Sometimes their free movement will tend to take the approximate form of a circle—probably with a diameter of over 30 feet when a class group of about forty children are taking part. They will also have inventive games, playing out stories and real experiences in mime and very simple speech. This is all part of their natural activity, and it is not included in their education in order to present it to an audience, but as a means of giving opportunity for the imaginative and physical powers of each child to grow.

Older children in a junior school will, if space and opportunity allow, launch out into wider and more skilled physical movements, and dramatic action which gradually assumes more recognisable forms. Again, it should be noted that the dramatic play which these children create themselves is seldom thought of in terms of a " performance " but for some years, in this junior stage of education, retains its free, informal character.

Planning and equipment

It will be clear, therefore, that the occasional performance to an audience is not the basis for the design of a hall in a primary school. A small audience of parents on an Open Day will gain a truer impression of the children's activities if they sit round them in a circle and see what they usually do in the hall, than if they sit in straight rows watching a platform at one end. And even when the whole school is being addressed from one spot it is more natural for the children to sit in a semi-circle than in straight rows. In general, therefore, a suitable plan shape will have a width of at

least two-thirds of its length, or may even become a square. (See Diagram No. 5.)

For infants, the whole question of a permanent stage is of small importance compared with the provision, in some form, of varying heights and levels, perhaps in small movable blocks which would add greatly to the opportunities for creative play. There might be a very simple movable platform with steps, or several small platforms which could be placed wherever they were specially needed.

For juniors, a slightly larger, more substantial movable platform may be needed, with units which could be built up at different levels to form steps, terraces, or promontories. This could be placed in different positions, perhaps on one of the longer sides in an oblong hall, so that the children could sit round it in a wide semi-circle. If sectional equipment is used it needs to be designed so that it does not break down into too large a number of very small pieces, as this would involve too intricate an operation each time it was dismantled or put together, and would take too long. It is probably unnecessary for the units to be smaller than rectangles of about 1′ 4″ × 2′ 8″ × 1′ 2″ high, provided that some half height units (i.e., 7″ high) are available for steps.

These junior children, with their widening horizon of interests and possibilities, begin to appreciate opportunities for more complex arrangements, and their imagination will be stimulated by a variety of exits and entrances, by pivoted or folding screens opening into adjacent spaces which might become an extension of the hall itself. If, as already mentioned in connection with the entrance space, the site conditions suggest a change of level between the entrance and the hall, further interesting possibilities present themselves, which will encourage the imagination of the children and the teachers. (See Diagram No. 6.)

Storage space will be necessary for properties, musical instruments, dressing-up materials. This should be readily accessible. There should be plenty of circulation space outside the hall, and easy access to lavatories and to class spaces. Access at one end only of the hall can never be satisfactory.

Colour

A large space of this kind will need a simple, balanced scheme of colour, without too much intricate detail, but with sufficient vitality to be stimulating and to avoid the risk of becoming dull.

Generally, ceilings should be lighter than floors. Walls should not be broken up into different colours, and light-reflecting colours should be used near the windows. Some bright or contrasting colours or features help to bring the interior into focus, but the common device of painting the doors in such colours may break up the wall-surface too much, and destroy the simplicity and unity of the general scheme. The texture and pattern of curtains, if they are provided, will enrich the hall. Since they are light and movable it is more appropriate that they, rather than the wall-surface should provide the vitality and gaiety. Curtains, specially if they are dark in tone, should be fixed so that they can draw past the actual window openings. Probably the cost of ceiling to floor curtains cannot be justified, but the practice of providing separate clerestory curtains may not be satisfactory because they attract too much attention upwards. Screening at a high level can be provided by blinds.

Windows

It is difficult to know how to strike a proper balance between the needs of physical training (for this, windows not below children's shoulder level (3′ 4″) would be welcomed by some teachers) and general amenity. Clearly there will be a greater sense of space and a closer unity between the building and the garden if the windows come down to the ground, or near to it, and this appears to be justified in spite of the difficulties connected

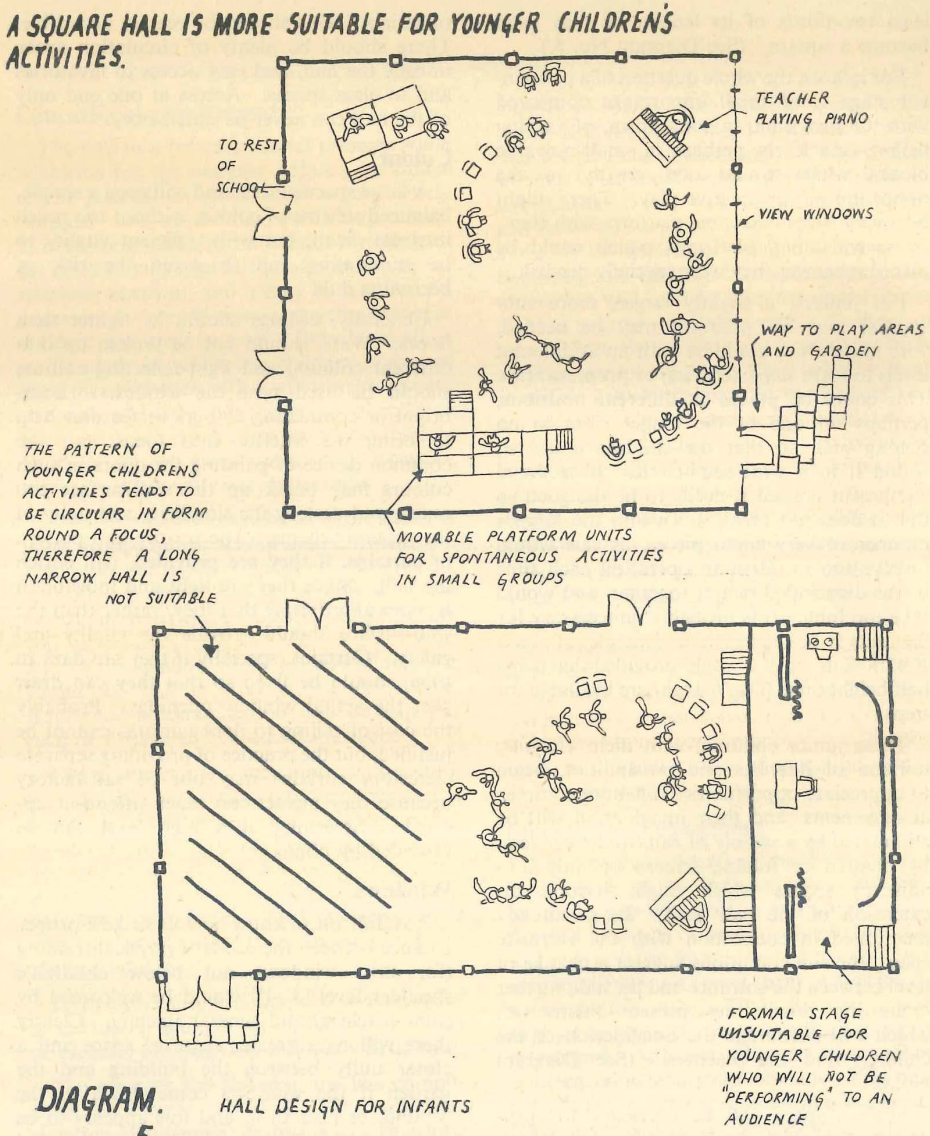


DIAGRAM. 5. HALL DESIGN FOR INFANTS

with ball games and races, provided that the low windows occur on one wall only. Some form of protection such as wired glass bottom lights, or low horizontal bars, should be provided.

Easy access from the hall to the garden is certainly an advantage ; whether it is direct from the hall itself or from a draught lobby combined with a store for games equipment and larger apparatus, can only be decided by local requirements. The two positions for opening lights are from 2′ 0″ up to door head level, and cross-ventilating clerestory windows. Opening lights at other levels will only increase the cost unnecessarily. For the high windows, the same points of design have to be taken into account as for the clerestorys in class spaces. Some precaution such as sun blinds may have to be taken to avoid sharp contrasts of light and shade on the floor, and dazzle for children's eyes when they run or dance towards the windows. It is important that the windows can be easily opened and shut, but with the minimum of heavy, complicated fixtures. Simple mechanical gearing is preferable to either pole or cord operation. If gearing is used, those parts in front of the glass should be painted matt white, as should the window bars.

Flooring

If only small quantities of higher grade flooring are obtainable, or can be afforded, it will probably be more appropriate to use them in the assembly hall than elsewhere. Reasonable quality of floor finish is so important, in fact, throughout the whole school, that when severe economies are being contemplated, floor finishes should not by any means be the first items to suffer, as is often the case. A non-slippery, non-splinter surface is essential, in view of the fact that halls in primary schools have to serve also as gymnasia, and a slippery floor may cause accidents, especially where apparatus is used. The children will often run or dance with bare feet, and there should be some means of preventing dirt or gravel being brought in from the garden, whether the access is direct from the hall or through a lobby.

Acoustics

The conflicting requirements in these halls make it difficult to achieve a satisfactory acoustic treatment for all the varying activities. In primary schools probably the most importance should be attached to singing, usually without an audience.

Heating and artificial lighting

The points on artificial lighting and heating that will be mentioned under the heading of class spaces apply also to the hall, except that separate control may be an advantage if the hall is used out of school hours when the heating of the class spaces should be switched off. It is important to get agreement on the control of artificial light points, and the position of points for wireless loudspeaker and film projection, etc.

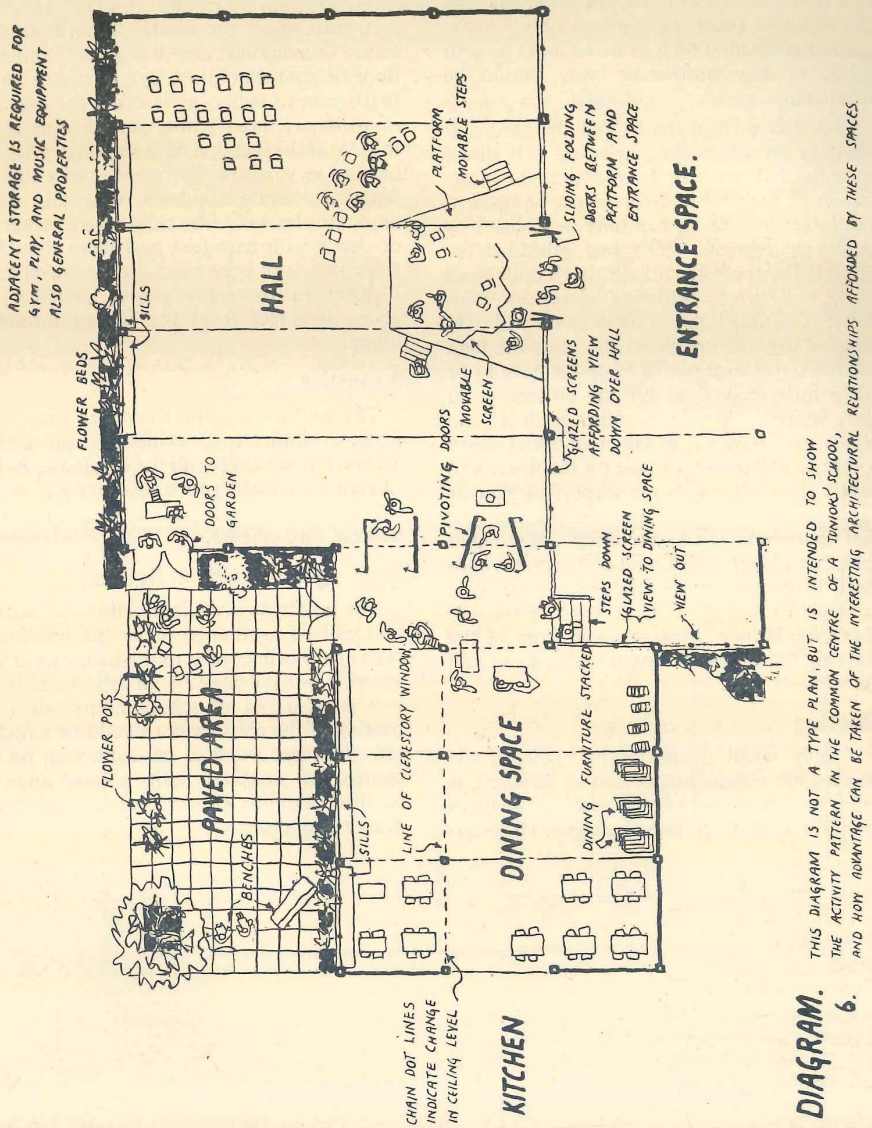


DIAGRAM. 6. THIS DIAGRAM IS NOT A TYPE PLAN, BUT IS INTENDED TO SHOW THE ACTIVITY PATTERN IN THE COMMON CENTRE OF A JUNIORS' SCHOOL, AND HOW ADVANTAGE CAN BE TAKEN OF THE INTERESTING ARCHITECTURAL RELATIONSHIPS AFFORDED BY THESE SPACES

THE DINING ROOM

General character

The dining room also has its own particular character, its own educational importance. It is not good, either for the digestion or for manners, to scramble hurriedly through a meal in noisy, crowded, over-heated surroundings. School dining rooms can be imagined as gay and attractive restaurants. There is a variety of plan and section arrangements which may often be more interesting architecturally than those designs of dining rooms which are associated with war-time expedients. Windows will be generous (with wide sills for flowers) letting in sunshine at the very least between twelve and one o'clock when the children are having their meal, and perhaps french doors may lead out on to a sheltered paved terrace or garden. Then there seems no reason why the children should sit in institutional parallel rows instead of in groups round tables of domestic size. The chairs and tables could then be light enough in weight for the children themselves to arrange or to stack away if the space is to be used during the later afternoon for other purposes.

The gaiety of this meals space will be increased by imaginative colour. The children will not be staying here for any length of time, and the general treatment can therefore be arresting and exciting, for these younger children enjoy simple, brilliant colours. Curtains, fittings, furniture, mural decorations, pictures, crockery—these should all contribute to, and be a part of, the whole design, and therefore they concern the architect closely. (It is hoped that before long it may be possible to replace the monotonous white crockery by coloured china, and also to provide table cloths.)

Inevitably there will be a tendency for the meals space to be noisy, with the moving of chairs, crockery and trollies, and a good deal of high-pitched talking. All possible means must be considered by which noise can be reduced. A sound-absorbent ceiling will help, also curtains, the careful choice of floor finish (which needs also to be non-slippery), and the fixing of rubber stops to all furniture legs.

Really efficient ventilation is of the utmost importance, particularly as dining rooms will often be planned in close relation to the entrance and the hall, so that they can be used as fully as possible throughout the day.

Service

The general tendency is for two children from each table group to fetch the food for their particular table. The service counter from the kitchen therefore needs to be as central as possible to enable the children to get their meals quickly and easily. This counter will be one of the main features of the room, and a focal point of the design, so that it should be treated decoratively ; the counter fitting should be simple, with easily-handled opening doors. The height of the counter can never be correct both for the adults serving from the kitchen and for the smaller children on the other side (2′ 10″–3′ 0″ is suggested) ; when the youngest children are served there will generally be a grown-up on the dining room side to hand the plates to them, to prevent them from having to reach up at the risk of spilling the gravy. The larger the hatch opening the better and quicker the service will be (to serve 10 people per foot run is considered a useful guide). In addition to the service from the kitchen there will be the return flow of used crockery which should go as directly as possible to the washing-up sinks, either through a separate hatch, or through a section of the main opening. To keep the level of this counter at exactly the height of the top of the draining board level is therefore important, but is not always remembered. Doors between dining room and kitchen should have a generous width, and will probably need kicking plates.

The kitchen and its ancillary rooms will be discussed in the section on administration rooms.

CIRCULATION SPACES

Educational requirements

In the past, corridors have often been under-lit, under-heated, and rather grim, with one purpose only—to act as traffic routes for children. It is true that traffic routes must be provided, but this being so, let them be used to the full, and become an integrated part of the whole school, not merely an appendix to it. The design of circulation areas which can be used for many purposes rather than for one only is not a luxury, but an economic necessity, and it is the architect's duty to ensure that the maximum amount of space in his school design shall be available for the fullest possible educational use. For instance, at the end of short runs of class spaces, it would be possible, by means of folding screens or panels, actually to enlarge the class area by throwing part of the circulation area into it. (See Diagram No. 7.)

Recesses and alcoves, interesting plan patterns (which may result from the informal arrangements of class spaces to suit contour and orientation conditions), wide sills, generous windows and plenty of wall surface suitable for pictures, posters and maps, will all help to convert these areas into pleasant, lively exhibition spaces. There will also be the possibility of treating them sometimes as small streets, with shops, banks, book corners and milk bars.

Nor will it be necessary, by so doing, to increase the percentage of circulation area ; with careful planning it should be the designer's aim to get below 20% of the total building area. This proportion is not always achieved in schools which may appear superficially to be economical in circulation ; the " strip " corridor is by no means always economical, giving access, as it so often does, to rooms on one side only.

Colour

Here, where there will be constant movement, the colour treatment can be really bold, with large areas of bright colours. The old colour ranges, chosen primarily for their dirt-concealing properties, are fast disappearing. The decision to use light or dark colours should depend not upon dirt, but upon lighting conditions and the general effect required. Light colours can, after all, be cleaned, and children can, as at home, be taught to respect them. We should also be prepared to break away from what used to be considered indispensable—the dado. If dark colours are appropriate to the general colour scheme in certain areas, it would be best to avoid breaking up the wall surface, by taking them up to the ceiling.

As a high proportion of gloss paint may be used, its dangers have to be noted—for instance the reflection of adjacent colours, and the excessive shine caused by certain lighting conditions which is not only uncomfortable, but destroys the sense of colour and form. It is, of course, a mistake to assume that paint is the only finishing material for these wall areas, where the use of natural materials is to be encouraged. Fairface brickwork, stone, tiles, wallboarding, wallpaper, fabric, all help to give interest and variety provided they are not used exclusively, and are considered in relation to the wear they will get. It must be remembered that some of these surfaces will have to withstand considerable wear and tear, particularly at corners and near doors. Materials and finishes must therefore be selected which are strong and durable and can easily be cleaned.

Windows and doors

Large window lights in circulation areas need not always be ruled out ; they can even come down to the floor if they are given proper

protection (for instance, by a portable flower pot container across the full width of the window or wired glass). These windows will help to increase the sense of space in areas which have often induced a feeling of enclosure and restriction. Also, if there are pleasant views it is good to see them when moving about the school, and windows should be placed with this in mind. It must be remembered, though, that when one is walking parallel to a line of windows, views will often be seen in sharp perspective, and windows should be designed to avoid obstructions. Excessive contrasts between light and dark need to be avoided, though some variation in lighting will add interest. Where long strips of top lights are used, sky brightness can cause considerable discomfort unless the lights are designed to reduce the contrast.

Whenever there is access from the outside which is frequently used, draught lobbies are recommended, with carefully-adjusted floor springs, to minimise door banging—a frequent cause of irritation in schools. Moreover, no heating system can be expected to run economically where only a single pair of external doors is provided.

Because circulation spaces frequently have external doors at one or both ends, there tends to be too much rather than too little air circulating, and it is common for an excessive number of opening lights to be provided. Fixed lights are not only more pleasant to look through (having neater frames) but are about a third of the cost of opening lights. Where coats are hung in alcoves off the circulation area these need their separate cross ventilation.

Heating

Circulation areas will probably contain the main arteries of the heating system. Floor ducts for this purpose are often unnecessarily costly. As well as being expensive they involve large numbers of access manholes which are more appropriate on a pavement than inside a school. If the main flow and return pipes can be simply accommodated at a ceiling level, they can be designed to contribute to the general heating of the circulation areas. When in the past corridors were treated solely as under-heated traffic tubes, they were a serious cause of draughts and heat loss from the adjoining class spaces. These defects will be avoided when, because of their wider use, the circulation areas are heated.

Sound absorption

A high degree of sound absorption in circulation areas must be achieved, particularly now that planning is becoming freer and more open. Ceiling and floor finishes which are sound absorbent are necessary.

THIS DIAGRAM IS NOT A TYPE PLAN BUT IS DESIGNED TO ILLUSTRATE THE WAY IN WHICH AN INFANTS CLASS ROOM WITH ITS STORE, CLOAKS, LAVS, OUTSIDE PAVED AREA, AND CIRCULATION AREA CAN BE GROUPED TO FORM SINGLE SELF CONTAINED UNIT.

THE MINIMUM PERMANENT SUB-DIVISION BETWEEN THE DIFFERENT PARTS ENSURES THE MAXIMUM USE OF THE WHOLE FLOOR AREA, AND FACILITATES SUPERVISION OF A WIDE VARIETY OF ACTIVITIES.

THE ACCESS TO THIS UNIT WILL VARY. FOR INSTANCE IT COULD BE ONE OF A PAIR WITH CENTRAL ACCESS OR A TERMINAL UNIT OF A SHORT RUN.

THE UNIT IS PLANNED ON THE 3'9" GRID

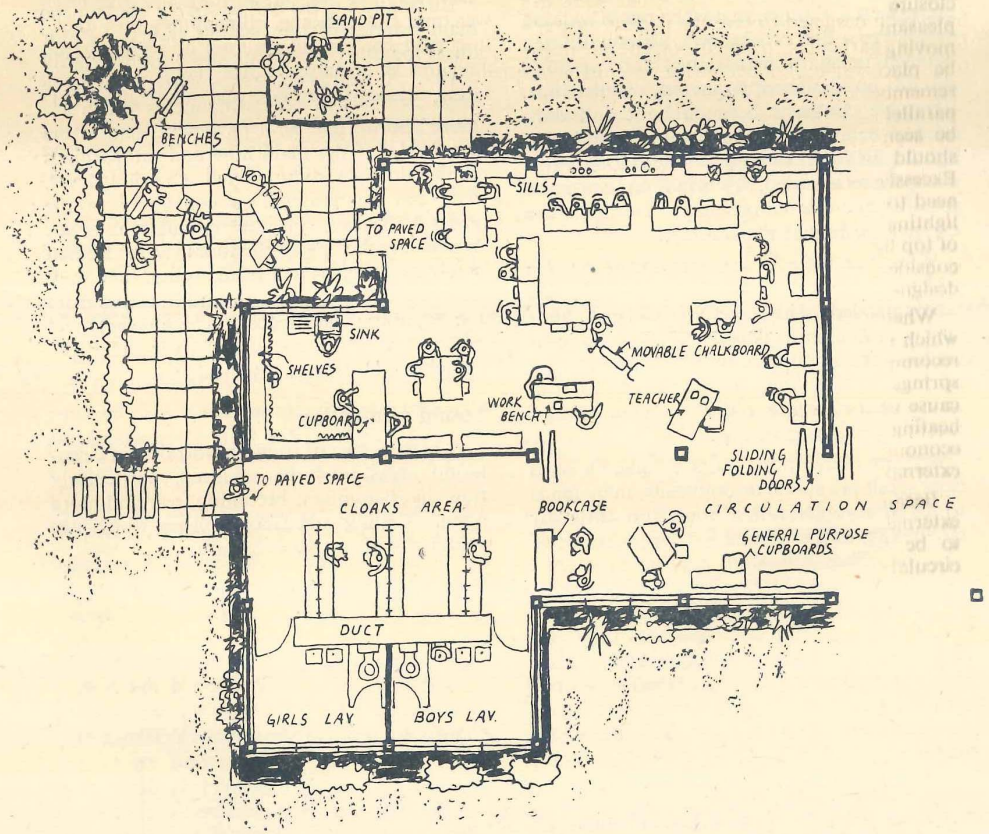


DIAGRAM 7. INFANTS CLASS SPACE.

CLASS SPACES

Approach to design

There is sometimes a temptation to generalise about the design of class spaces, and to assume that a string of identical compartments will be all that is required. Many have been built recently which seem to have been designed to give the perfect answer to one particular problem (such as daylighting), while failing to give sufficient consideration to other aspects. This incomplete approach has led very often to a rigid cross section, and has tended to set an almost standardised pattern, with no differentiation between older and younger children. But as much care is needed in assessing the changing requirements of class spaces as in assessing the requirements of the dwelling rooms of a house. It would be an excellent idea if architects were sometimes to set up models of varying types of class spaces, complete with furniture and equipment. In this way both the clients (and the architects) could really understand what they were going to get ; bare outlines to sixteenth of an inch scale give insufficient information when new ideas are being developed.

No one factor should ever be considered in isolation as they will all inevitably interact. Good designing will include the study of the educational needs of each particular age group of children ; of general character and scale ; of fixed equipment and furniture ; of colour treatment, daylighting, sunshine and artificial lighting ; of sound insulation, ventilation and of heating. These different aspects of design will be briefly discussed in the notes that follow.

Educational requirements

A sense of security has already been mentioned as one of the most important needs of young children. It becomes clear, therefore, that the old type of institutional classroom, approached from a corridor where large numbers of other children are crowding, is not appropriate for the youngest infants who are new to school life. A basic change of scale is called for, from that of an institution to one more in keeping with the small world which children inhabit, so that they will feel welcome and at home. Sometimes we forget how near the ground children do in fact live, and how important it is for them to be able to see out of windows, to open doors, to look with detailed intensity at a picture hung on the wall. These children need a small domestic environment, which could include its own front door, sanitary accommodation and cloaks space, its own class area and its own piece of garden. Within this self-contained area the children can almost live as an independent group at first, with the teacher able to watch and help them. Thus they can gradually get accustomed to the larger school community and to taking a share in its wider activities. (See Diagram No. 7.)

Young children are intensely interested in the objects around them—their shape, form, colour and use ; " at once absorbed in creating their own miniature world of imagination and emotion, and keen observers who take pleasure in reproducing their observations by speech and dramatic action." . . . * Part of the time they will spend in small groups, learning by imagination and experiment (shopping, dressing-up, cooking, painting hammering, modelling) ; part of the time they will spend more quietly in larger groups perhaps, listening to stories, learning to read, write and count. The " directional " classroom, with its rigid rows of desks (" to stuff the desk-bound child with facts ")—is not suitable to the needs of young children.

The class space is becoming, instead, an enlarged " family room," colourful, homelike

* Report of the Consultative Committee on the Primary School, 1931. H.M.S.O. 1931 (Reprinted 1948)—2s. 6d. net. (2s. 8d. post free).

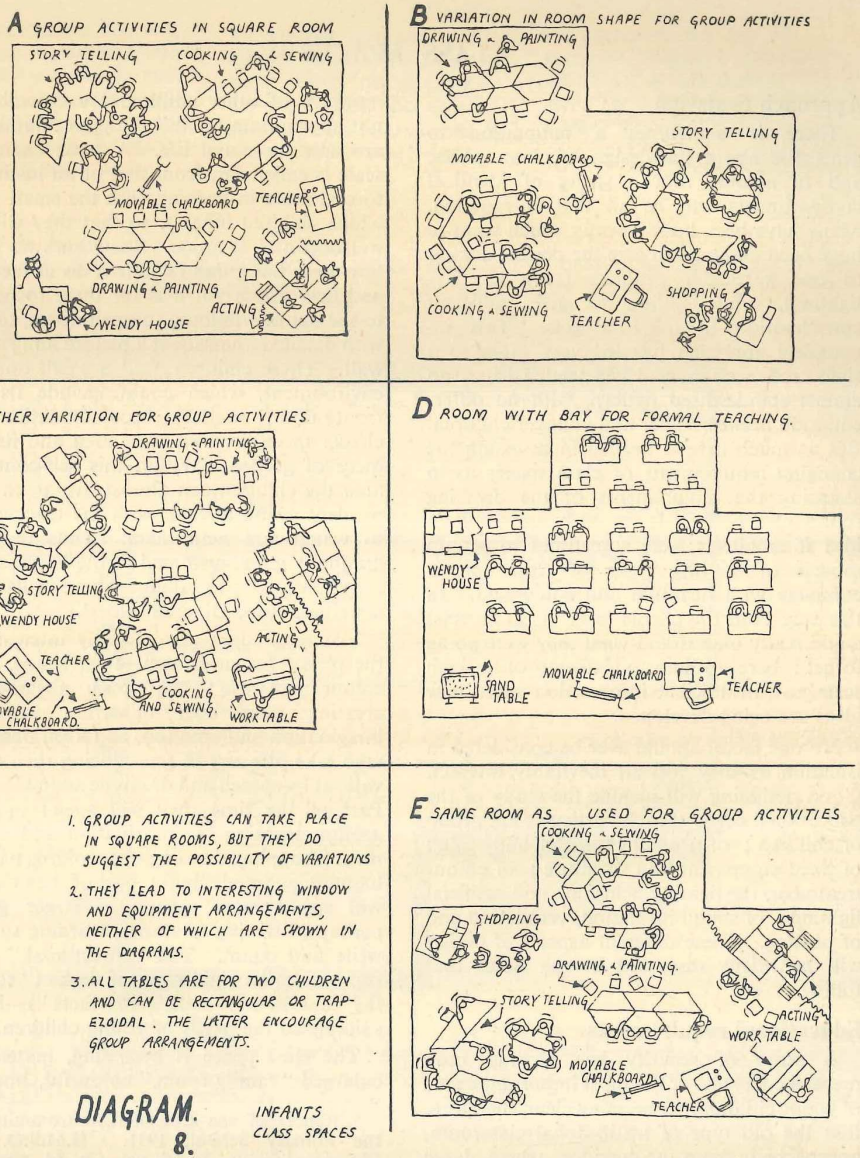


DIAGRAM. 8. INFANTS CLASS SPACES

and informal. There may perhaps be forty children, with forty different approaches to many interests, and space must be thought of in terms of these small, simultaneous activities, with a wide range of easily accessible materials and tools. It may be that a simple rectangular plan shape is not the most suitable for infants, and within the recommended areas the possibilities of an alcove or recess, of a small area which can be curtained off to form a space for a " house " or a " shop " might be investigated. Perhaps sometimes the prescribed stores might be in the form of alcoves, so long as a lock-up cupboard is provided. (See Diagram No. 8.)

The older children will begin to investigate not only their immediate surroundings but the neighbourhood in which they live, gradually extending their interests to wider spheres. They will be taken out into the community (into the factories, farms, workshops) and the community will be brought into the school (maps and wall newspapers, models and pictures, school shops and banks). Many school projects will lead to analagous activities outside the school, showing the interdependence between the two environments. There will consequently tend to be a wide range of practical work in all the rooms and not only in the general purpose rooms ; wall, floor and storage space will be needed on an increasing scale. Ideally, every junior class space would have a small work annexe opening out of the main room, with a bench or strong table, gas or electric points, sink, cupboard and shelves.* But such additional accommodation will have to be deferred until the cost of building is reduced. If general purpose rooms are included, they will be useful for the older juniors especially, with their growing interest in more specialised crafts. They will be able to work on quite large-scale undertakings, which may take a number of weeks to complete.

* An example of this can be found in the Crow Island School in Winnetka, Illinois, illustrated in the Architectural Forum, August, 1941.

General setting

The design of a class space can be controlled and unified by relating all its parts to the sizes of the children who will inhabit it. The need for comprehensive anthropometric data for this and for all kinds of school equipment is realized. The Ministry is in touch with those who are collecting this data and it is intended that this shall form the subject of a subsequent bulletin. All quotations of children's dimensions in the text or in the diagrams are the result of only very small-scale amateur surveys, and cannot be taken as authoritative.

Diagram No. 9 shows the relation of the main elements in class spaces to children's measurements. Dimension B need not be used, and all pin-up boards can be taken to doorhead level if desired ; but if this dimension is observed, the appropriate children's scale will be emphasised.

Fixed equipment

Having determined these main proportions, care must be taken not to destroy them but rather to emphasise them by the detailed design of fittings and colour treatment within the general framework.

Individual items, such as chalkboards, pin-up panels, sinks, cupboards, milk trays, should not just be inserted on their own merits, but should be considered as part of the whole scheme. Unless this is done, they may seriously conflict with each other, and produce an uncomfortable and restless room.

The general proportions of the chalkboard and pin-up panels have already been indicated. Until recently it has been assumed that there should be one teacher's chalkboard which is the focus of attention ; but with the changes in the methods of teaching, one fixed chalkboard position is no longer appropriate for infants, and is becoming less important for juniors. Instead, all the factors affecting the wall area between the heights of 2′ 0″ and doorhead level need to be considered together, such as pin-up areas for pictures, notices, etc.,

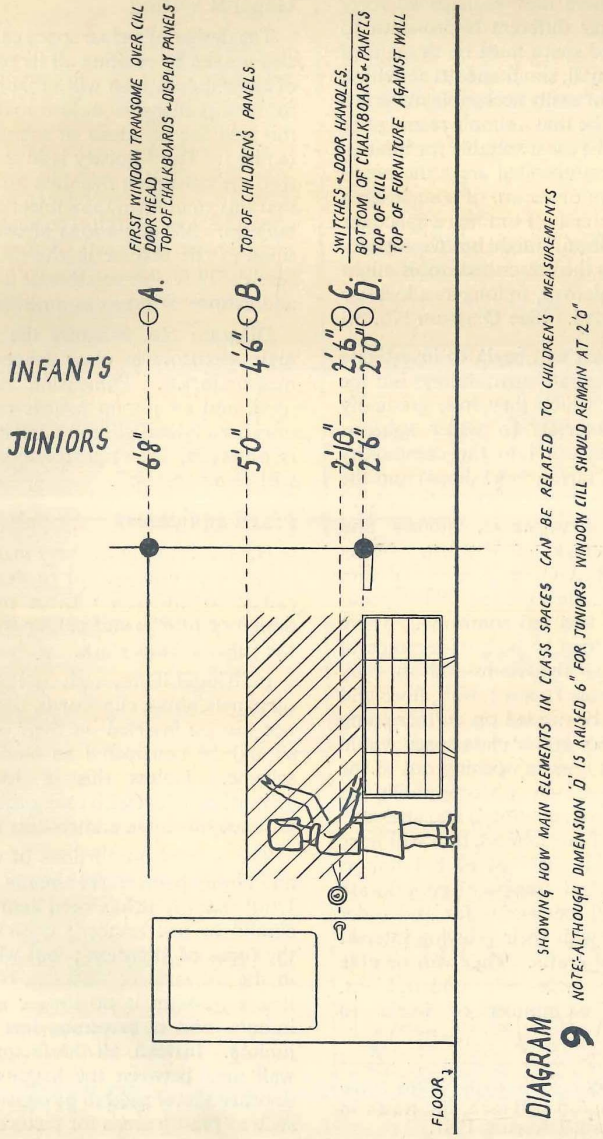


DIAGRAM 9 SHOWING HOW MAIN ELEMENTS IN CLASS SPACES CAN BE RELATED TO CHILDREN'S MEASUREMENTS

NOTE:-ALTHOUGH DIMENSION 'D' IS RAISED 6" FOR JUNIORS WINDOW CILL SHOULD REMAIN AT 2'6"

drawing surfaces for the children, and chalkboard surfaces for the teacher's demonstration. It would be a mistake to prescribe too rigidly the amount of wall surface needed for each of these requirements. The simplest and most flexible solution would be to find one material which would be capable of receiving different colour treatments to serve all of them. This does not appear, however, to be possible at the moment, so that different materials will have to be selected, and appropriate placing and sizes will have to be agreed in accordance with local requirements. These areas are so important that it is safe to say that all available wall surfaces between the two heights should be used for them.

This leaves from ground level up to 2′ 0″ for wall equipment, either movable or fixed. For infants, as has already been mentioned, large quantities of different materials and tools need to be easily found and easily put away by the children themselves. This suggests the maximum amount of simple cupboard space at this low level, rather than individual items of furniture designed to take special equipment within the room. Infants' sinks and milk trays can be accommodated within this general height level, and also small wall locker units for the children's personal belongings where flat-topped tables are used instead of desks.

The top of locker units should not be higher than approximately 2′ 0″–2′ 6″, so that it will not interfere with the pin-up panels, and so that it can be used as a "working surface." Each locker will only have to be large enough to take the odd personal belongings of the children (probably about 10″ × 7″ × 6″ high for the younger children and 13″ × 8″ × 6″ high for the older ones). All these lockers will be a permanent piece of class equipment; space will have to be allocated for them to be fixed as part of the whole room design, probably along one of the partition walls but not under the main windows. The locker units could either be in the form of small trays which could be taken out, or merely pigeon-holes with flap-down doors to cover them. Any other special fittings, such as display shelves for picture books, which may be thought to be necessary ought, too, to be designed to come within this general framework.

For juniors there is no need for the bottom of the pin-up and chalkboard area to come below 2′ 6″, and this will give more space for fixtures or furniture except on the window wall where the sill should still be kept down to 2′ 0″. A similar arrangement to that described for infants will be needed, but with possibly more special types of fittings, particularly in general purpose rooms—(such as bin storage, display cases, bookshelves, etc.)—which can be worked out in accordance with each local authority's wishes so long as they fit into the main dimensional framework.

Storage space

The fittings for storage of materials and tools inside the room itself will of course have to be supplemented by separate but adjacent store-rooms or cupboards. This storage space is extremely important, and care should be taken to make sure that sufficient provision is made. It is generally considered that the store should open directly out of the class space. The size and shelving requirements will be agreed with the educators, but on the whole it is necessary to provide as much space for infants as for juniors, for their materials and equipment take up a considerable amount of space. The shelving should in any case be wide enough to take imperial sheets of paper and cardboard. Musical instruments may sometimes be kept here.

Furniture and movable equipment

Furniture designed for primary schools (both for children and teachers) has undergone radical changes, like the rest of the school. It is now being designed and selected for comfort and correct posture and not, as in the past, exclusively for ease of maintenance and durability which resulted in the immovable solidity of cast iron and pitch pine, which have not yet entirely disappeared.

Furniture can only become an integrated part of the whole if its selection is the responsibility of the architect who builds the school. So long as maintenance of school furniture was the chief concern, it was natural for an administrative officer to have this responsibility, but it does not follow that this is a valid procedure for new schools.

If the furniture is to be cheap to manufacture and simple to arrange in the class spaces, it will not be possible to make as wide a selection of sizes as dimensional surveys may suggest. It should not be necessary to have more than two (or at most three) size ranges of furniture in any one class space. Dimensional surveys, however, will give a good guide to the numbers of tables and chairs that will be required in each size range. Children between the age of five and eleven years will need chairs of the following heights (measured to the lowest portion of the seat) :—

Chair height	*Percentage distribution*
8½″	5%
10″	35%
11½″	40%
13″	18%
14½″	2%

There is as yet insufficient evidence to say what the respective desk or table heights should be, but clearly they should be related to the chair heights in such a way that both adequate knee room and a comfortable forearm position for writing are achieved. As children will be constantly moving from place to place, and even carrying chairs from one room to another, some distinguishing colour treatment would help to relate table and chair sizes.

In the infants' room, tables will be used for many different purposes, such as drawing, painting, modelling. If they are each for two children (approximately 3′ 0″ × 1′ 6″) there will be space in a room of approximately 600 sq. ft. for the twenty tables to be arranged in many alternative ways in addition to the traditional rows, either in informal patterns or butted together to form larger surfaces for group-work. (See Diagram No. 8.) It is essential for chairs and tables to be both light and strong, so that they can be easily moved by the children, and stackable, so that the floor can be cleared. To avoid intolerable noise, rubber stops will always be essential. The table tops must be hard-wearing, with a matt surface. Plywood is not necessarily the best material for this, and may, with the usual treatments, show scratches too easily. The seats and backs of the chairs should be warm to the touch, but canvas is unsatisfactory because it is easily damaged and soiled.

When desks are provided in juniors' rooms, the individual type is preferable to the dual type because it enables greater variety of arrangement. The tendency, however, may well be to use dual tables for juniors as well as for infants. Tables and desks have the same requirements, but if tables are used, space for private belongings must be provided somewhere. Separate lockers (already mentioned under " Fixed equipment ") are preferable to shelves under the tables because such shelves will tend to make the tables either too high for comfort, or the shelves too shallow.

Strong tables with unpolished tops (about 6′ 0″ × 2′ 6″) will be required for practical work such as puppetry, weaving, bookcraft, etc. ; also light benches for simple woodwork.

The teacher's table should be light and unassuming, and have at least one drawer ; it should be easily movable from one part of the room to another.

Although the architect will not necessarily be responsible for other light equipment in class spaces (such as dressing-up boxes, clay bins, sand trays, etc.) it is essential for him to have them in mind, so that they can be accommodated easily and used freely. Also the architect may well be able to influence the design of some of this light equipment : for instance, children enjoy listening to a story and reading aloud, and will want to look at

books and pictures for themselves. The germ of a library will therefore begin in the infants' class spaces, perhaps in the form of a small, portable stand with narrow shelves, so that the books can stand upright and catch the children's eyes. Another example is movable chalkboards which may be wanted in place of the old easels to supplement the fixed boards already mentioned. These would have to be light for handling, easily wheeled, and compact for storing ; they would be used either for the whole class or for small groups of children. An electric point in each class space will be useful for radio and occasional requirements (such as an electric iron for dressing-up clothes, etc.).

Colour

Colour is not merely a " decorative feature " to be applied after the main structure is built. It has a very important part to play in helping to make the class spaces really belong to the children, comfortable and cheerful ; for it must be remembered that they will spend a lot of time in these spaces, and will look upon them as their own particular homes.

It would be out of place to recommend particular colours, but a simple guide can be given in order to ensure that the general scheme is appropriate. Ceilings should be highly light-reflective in order to help the efficiency of artificial lighting and to reduce contrasts caused by shadow areas above the windows. Walls above door height should be in matt, pale colours, to make the fullest use of reflected light and to avoid raising the centre of interest above the level of the children. Lighting conditions of the room will not make it necessary to paint all the walls the same colour because it is particularly important that the wall surfaces adjacent to window openings, columns and glazing bars should be painted in the most light-reflective colours possible. The wall panels from 2′ 0″ to door head level will be the main centre of attention in the room. Black for chalkboards should be avoided, as this always has a disturbing effect. Any colour can be used for this purpose so long as it is dark enough to provide sufficient contrast with the chalk. This enables a colour to be selected which is more in keeping with the general scheme. The main pin-up areas should form a neutral background for display, and will probably be broken up into a small scale by the superimposed pattern of the drawings and pictures pinned to them. The wall surfaces up to 2′ 0″ can have the brightest and most stimulating colours and pattern treatment, and this will merge with and reflect the stimulating pattern of the children and the furniture. Thus by emphasising the small scale and exciting pattern at *low level only*, the room will become a children's room and not just an adults' room into which children are allowed to come.

Daylighting

Up to the present, regulations have been mainly concerned with increasing the amount of daylight to be admitted into class spaces. This has undoubtedly had a beneficial effect, but it is now beginning to be realised that *quantity* of light by itself is not enough, but must be considered together with the *quality* of light. Too many teaching rooms have been designed on the basis of the amount of light without consideration of its effect and this has tended to produce too flat a light over the whole area of the room, giving a dull and soporific effect. The protractors can determine the sky factor,* but can give no guide to the

* The " sky factor " is the proportion of daylight which is computed as coming direct from an area of sky to any chosen reference point indoors, and does not include any contribution of reflected light from the boundary surfaces of the room. It can be computed in advance but cannot be measured.

The " day-light factor " is now interpreted as a measured proportion of daylight, including contributions by reflection. It can be measured in a completed building, but not computed in advance.

What has been understood hitherto, and is referred to in the Regulations, as the " daylight factor " should now be termed the " sky factor."

quality which is affected by sunshine and reflected light, producing patterns of light and shade. It is necessary for the architect to be able to foresee and design for the right degree of brightness, contrast and stimulation, while avoiding glare conditions. It will be easier for him to do this if he does not exclusively concern himself with the constant sky factor but rather with varied arrangements of window treatment, so long as he ensures that in no part of the room will the amount of light fall below the recommended minimum of a 2 per cent. sky factor.

When straight blocks of teaching rooms are built, the familiar clerestorey lighting will be necessary, or some form of carefully-designed ventilating top-light (which would have the advantage of permitting a lower ceiling). However, this must be regarded as only one of the possible solutions, for many conditions will call, as already suggested, for freedom of planning to give more individual treatment of the class spaces. These varying plan forms will certainly encourage more variety also of window treatment, which in turn will result in more variety and interest in the lighting conditions within the rooms. Experience suggests that some such arrangements are cheaper than the usual clerestorey arrangements, because if eye-level windows are provided on more than one wall, the height of the ceiling can be lowered without reducing the amount of daylight below the statutory requirement. This not only gives a more domestic scale to the room (particularly welcomed for the infants), but effects a considerable reduction of cubic content. Whatever arrangement is adopted, some form of cross ventilation must of course be provided.

In Diagram No. 10 it will be seen that in most cases the large windows will face the sun, but case "F" shows an arrangement, not generally recommended but useful where there is an excellent view to the north, or where, if the main windows faced south they would look into a steeply rising bank.

Sunshine

So far daylighting has been discussed, as opposed to actual sunshine, which of course greatly affects the lighting of a room. What is probably the earliest recommendation for school buildings (1815) suggested that if light were admitted from one side, it ought to be from the north, "that being the steadiest, and freest from sunshine." But to-day the importance of getting sunshine into habitable rooms is universally recognised: nevertheless the fullest advantages are not always taken of the alternative plan arrangements to ensure the maximum amount. It is important to remember that, especially in winter, rooms which are going to be occupied at 9 o'clock in the morning will give a warmer welcome if the sunshine has already penetrated into them, even through high up side windows. It is, however, essential to be able to regulate the amount of sunshine—without some form of control excessively bright reflections from table tops and window sills and a distracting pattern of shine and shadow on the wall surfaces will cause discomfort and eye strain. Common devices of fins and canopies do not cater for all the conditions that may commonly arise, though they might be reasonably satisfactory if the children faced only in one direction all the time. But in order to satisfy the much more difficult conditions of modern teaching, with the children often working in small, informal groups which may face in any direction, a more flexible system of sunshine control becomes necessary. Some form of louvred blind, therefore, is to be recommended (although existing patterns need to be developed to meet school requirements). Not only does a louvred blind produce, in a delightful way, an interesting and stimulating small-scale pattern, but is likely to be cheaper than fixed sun-shields.

One of the class spaces can be darkened, if required, for the projection of films; absolute darkness is not essential, and well-fitted louvred blinds for the main windows should

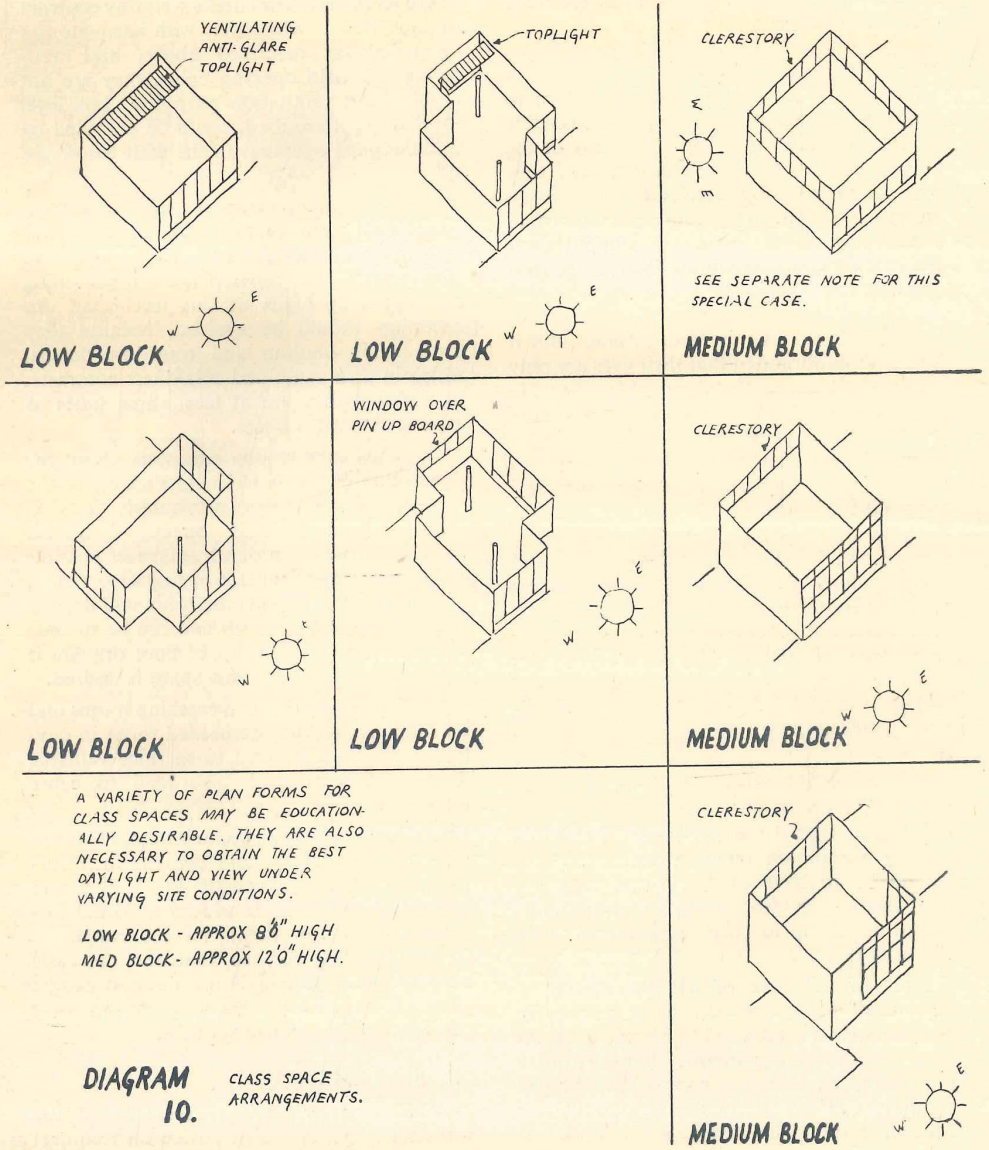


DIAGRAM 10. CLASS SPACE ARRANGEMENTS.

answer the purpose, if other blinds are fitted over the clerestory windows.

Windows

Class space windows are not there merely to let in the light and sunshine, but also to enable the inhabitants to look out. In many of the older schools, far from achieving this, they were often specially designed not only to prevent any child from looking out, but to prevent any person outside the building from seeing what was going on inside. Here again opinions have changed, and for some time it has ceased to be considered a deterrent to education if children can see outside. But it is sometimes forgotten that their eyes are only about 2′ 6″ above the floor when they are sitting down (if they are five or six years old), and that the window sill should therefore be about 2′ 0″ high. At this level a wide sill would be very suitable as a " working surface " for children, where they can put down flower pots, water plants, or watch goldfish. The surface should be hard, easily cleaned and good to look at. The outlook from these windows should include as wide and restful a view as possible, unobliterated by a close-range view of another wing of the building, which is nearly always distracting and not always beautiful, with perhaps some small-scale planting quite near, to give variety and interest.

Coming to the actual design of the main windows, the over-all proportions are again determined by the measurements of children and by ventilation requirements. The aim should be to have no horizontal bars obstructing the view from the eye level of infants sitting down, up to door head height. (See Diagram No. 11.)

Most of this area of window should be capable of being opened mainly because in summer weather it is good to be able to throw open a large area of window. For day-to-day (and winter) ventilation, comparatively small ventilators at the top of the window will be needed. Sill hoppers involve a horizontal bar at eye level, and their cheeks seriously obstruct oblique views. Moreover, with adequate top ventilators as described above, and well-controlled main opening lights, they are not required for ventilation purposes. Low level ventilation, if required, could be provided by well-designed openings in the wall below the sill.

The remaining portion of the window area, above door head level (the size of which will depend on the design of the room) can have fixed glass. The common fault of providing more opening lights at this level than are necessary should be avoided, because they cause thick mullion and transome details, which in turn cause bad brightness contrasts. In addition they are at least three times as expensive as fixed lights.

Opinions vary among educators about the desirability of access from class spaces to the garden. For infants particularly this is important, but whether directly from the room itself, with the disadvantage of possible draught and the advantage of easy supervision, or from a lobby outside the room will depend upon local wishes. A sill that can be stepped over would lessen the risk of floor draught if direct access from the class space is desired.

Glazed screens between teaching rooms and corridors should not be needed to let in daylight ; they are inclined to sacrifice valuable display surfaces and also tend to cause distraction.

Clerestory windows, because they are always seen against the sky, and because their surrounding areas are usually in shadow, are often the cause of considerable visual discomfort. Careful design of the reveals is therefore called for, so that the contrasts between light and shade are not too acute ; glare will be reduced if the adjacent low roofs can have light-reflective surfaces.

Artificial lighting

Although it may be necessary for the architect to get specialist advice on technical

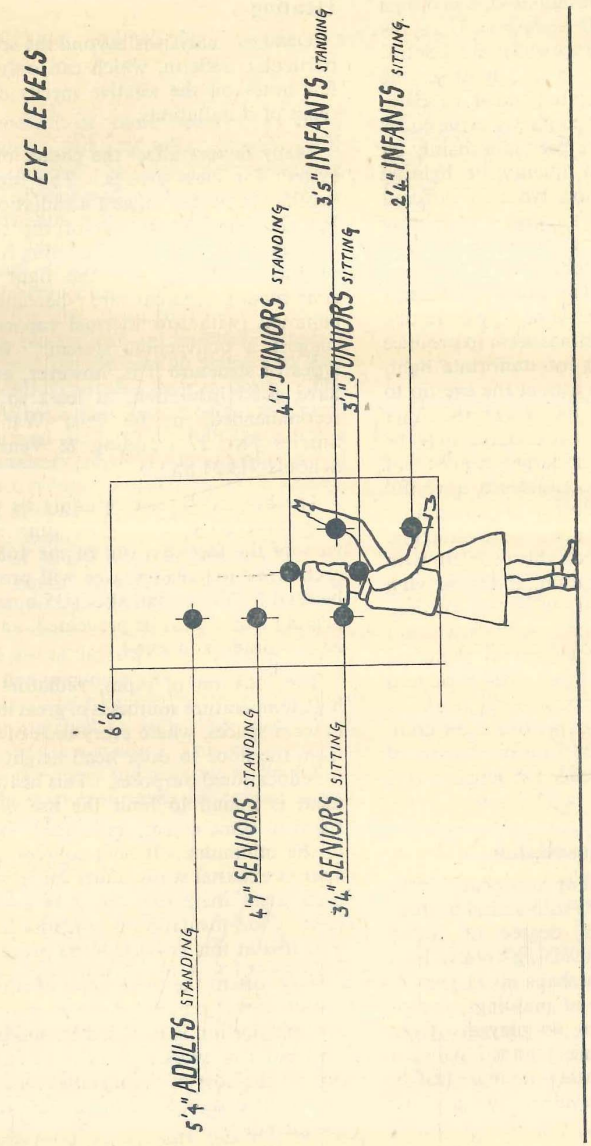


DIAGRAM. 11. AVERAGE HEIGHTS OF CHILDREN'S EYE LEVELS SHOWS IMPORTANCE OF AVOIDING TRANSOMES WHICH OBSTRUCT VIEW. THIS SUGGESTS A STANDARD LIGHT TO SUIT ALL AGES.

aspects of the lighting installation, the design of the fittings and their arrangement in the building should be entirely under the control of the architect. As in daylighting, the quantity of artificial lighting must be combined with quality. The emphasis in the codes of practice seems to have been laid mainly on quantity. But the flat quality of lighting provided by the common types of diffused fittings lacks an appropriate degree of sparkle and stimulation. This " appropriate degree," however, calls for considerable skill in design, as too much sparkle will cause discomfort through glare, in just the same way as in day lighting. Most school fittings seem to produce either too much glare or too uniform a light, in both cases tending to attract the eye up to the ceiling, the one type by its size, the other type by its brilliance. The trouble may be remedied by providing a larger number of smaller fittings, which could form a restful ceiling pattern with a degree of stimulation that is not bright enough to be distracting. The Ministry is working on this problem with the Building Research Station, and is carrying out tests with different types of fittings. Artificial lighting in primary schools will not in any case be used extensively ; therefore simpler fittings, which can be produced cheaply in quantity, may be more appropriate than the comparatively expensive ones commonly available. A discussion on the use of fluorescent lighting is outside the scope of this first bulletin.

Acoustics and sound insulation

In class spaces the ceiling will probably be the easiest surface to treat with sound absorbent materials. A high degree of sound reduction between the teaching rooms in a primary school is not perhaps so important as in some other types of buildings, except where music is likely to be played. Even where no store-rooms are planned between two adjacent teaching spaces, a single leaf of 4½" brickwork, or its equivalent, will give just enough sound insulation.

Heating

Detailed analysis is beyond the scope of this particular bulletin, which can only include a few notes on the relative merits of different types of installations.

Many factors affect the choice of a heating system for class spaces. The high rate of ventilation would suggest a radiation system ; but the intermittent use of the rooms (requiring rapid heating and cooling for the sake of fuel economy) and the light forms of construction which are becoming more common (with low thermal capacity) would suggest a convection system. With these types of structure it is, however, essential to have good insulation, at least to standards recommended in the Post War Building Studies No. 27 (Heating & Ventilation of Schools—H.M.S.O.).

The heating should certainly be controlled thermostatically and by a time switch, in view of the fact that out of the 168 hours of each week the class spaces will probably not be used for more than about 35 hours. Overheating would thus be prevented, and running costs would be lowered.

The location of pipes, radiators or other high temperature sources is of great importance in class spaces, where every inch of wall area, from the floor to door head height is needed for educational purposes. This heating equipment is bound to limit the use of the wall space to some extent, and should be reduced to the minimum. If heat sources are placed against external walls under large windows—even when there may be only a very small area—good insulation is essential if excessive heat loss at this point is to be prevented.

Very often the real cost of the heating installation is concealed, because a considerable proportion is included in builders' work. This builders' work may be out of all proportion to the cost of the installation in primary schools if elaborate or large-scale floor ducts are included.

COAT HANGING AND SANITARY ACCOMMODATION

Dispersal

The dispersal of these spaces has been recommended, but to what degree will obviously depend on particular planning solutions. If designed with sufficient skill, a break-down into quite small units (to serve one, two or three class groups of children) can be as cheap as some of the more common, centralised arrangements. The high ceilings, necessary for the ventilation of the large centralised blocks, can be lowered, reducing the cube, and the circulation space and wall area per child can also be cut down. The teaching of hygiene is an important aspect of education, and there is no doubt that smaller units of sanitary accommodation planned in close relationship to particular class spaces, or groups of class spaces, will be welcomed by teachers. Also the comparatively small numbers of children using each unit will engender better behaviour than the large concentrations in centralised blocks. However the sanitary accommodation is divided up for the rest of the school, it is most desirable for the five-year-olds to have their own separate space (sub-divided of course for boys and girls) attached to each class space or to each pair of class spaces. This will facilitate the best supervision and training, and will help to keep the class group area self-contained and domestic in scale.

General planning

If the coat-hanging accommodation is planned in small areas, it need no longer present a dominating array of crude metal screens and fittings, but can become a simpler arrangement more in keeping with its function. It will not always be necessary to provide separate rooms ; varying alternatives are possible, such as, for example, alcoves or bays opening off the main circulation area. Good ventilation is necessary, as has already been mentioned, and in schools which have no special drying rooms, the heating should be capable of being temporarily increased in the coat-hanging space. The fittings should be arranged if possible at right angles to the source of light. The simpler the fittings, the better ; after all, hats, coats and shoes should not require a highly-complicated structure.

When considering the layout of the areas for wash-basins, w.c's and urinals, the following notes may be helpful :—

(1) easy access, both from the class spaces and from the playground ;

(2) good circulation to the different fittings. It is important to remember that the children should pass by the basins after using a w.c. or urinal, so that they will be encouraged to think of washing their hands ;

(3) simple, straight runs of equipment, possibly backing on to a duct, to economise on plumbing and supply piping. (A continuous tank will enable w.c's to be flushed more rapidly, and thus allow a larger number of children to use each fitting in the " rush hours ") ;

(4) avoid culs-de-sac. (The risk of these is not great except in large central blocks.) Avoid long runs of urinals, and avoid corner fittings ;

(5) good cross ventilation, with window sills as low as the situation permits, in order to avoid the enclosed effect which high windows in a small room often give.

Fittings and equipment

The sanitary fittings should be selected to avoid special equipment and devices which are associated with big institutions, the aim being to produce a domestic effect. The size of the school programme, and the large amount of sanitary equipment involved, throws out a challenge to the manufacturers, whose present

designs and prices are not always appropriate. There seems to be little attempt so far to reduce costs by large-scale production of a small number of well-designed types. But it has already been proved that in schools where basins, urinals, drinking fountains, etc., have been re-designed on a rational basis, savings in cost can be made.

To take a basin as an example, these are the main features to avoid :—

(1) overflows that can be tampered with, and will collect dirt ;

(2) large horizontal surfaces ;

(3) taps that are hard to clean ;

(4) smooth soap trays with inadequate fall and single outlets ;

(5) uneconomic bowl area in comparison to the whole fireclay area.

There are various ways of drying hands : individual towels are still probably the most satisfactory, although present conditions make it difficult to use them on a large scale. If it is hoped to have them in the future, it should be remembered that they will require a good deal of free wall space. If paper towels are used, there should be a neat receptacle for them after use. The roller towel is probably at present most commonly used. In any case, the children will need plenty of space for drying their hands, as this is often a longer process than washing them.

The number and placing of mirrors is of course a question to be decided locally. There are reasons against having them directly over the basins, as the children may get in each other's way, and hair-combings may fall into the basins. A long mirror, placed not necessarily near the basins but somewhere in the circulation space could encourage children to hold themselves well.

It is hoped that eventually it may be possible to include showers for use after games, as these are obviously desirable, if economies could be made in other directions to keep the total cost within the reasonable range. Even footbaths would be extremely useful. A simple, long, narrow trough through which water could run is all that would be required, with some form of seating along the edge. It should be long enough to cater for one class group quickly.

Separate taps or fountains must of course be provided for drinking. These need not necessarily be near the wash basins, but might be placed near the entrances from playgrounds, inside the building. The provision of drinking fountains outside will depend on local wishes. It appears that there is no satisfactory design of drinking fountain on the market which is cheap and easy to operate.

The heights of the various fittings will be determined by the information obtained from dimensional surveys. As has already been mentioned, it is hoped to make this available later, but meanwhile the data in the diagrams showing eye level heights and general working heights will give a guide.

Hot water

It is very costly to provide hot water for washing in primary schools all the year round with normal types of hot water installations. Considerable economies can be made, however, if hot water is provided by the same heat source and through the same piping as is used for the space heating of the school. Branches from this heating installation can be taken to local calorifiers fixed near the basins, where the hot water can be mixed with cold to give a controlled water temperature of approximately 105° F. This permits the provision of one tap only per basin, and therefore saves cost. Immersion heaters in each calorifier will provide localised hot water in the summer months when the heating installation is not in use, and when electric current is not in such demand as during the winter.

Colour

There is no reason why colour treatment for these spaces should not be considered as

carefully as for the other parts of the school. Probably white will dominate, but bright colours—for instance on the doors—and contrasting colours behind the white fire-clay basins will add gaiety. Colour can also be used for purposes of recognition—for example, to distinguish between boys' and girls' accommodation, and to associate groups of coat-hanging and sanitary accommodation with particular class spaces.

ADMINISTRATION ROOMS

Staff rooms

The head teacher's room should be somewhere near the entrance, to be easily found by children, teachers and visitors, but protected as much as possible from noise. There are conflicting views among teachers about the best position for their common room : some prefer a quiet situation, somewhat removed from the main flow of activity, others prefer a central position. These rooms for the teaching staff give the only opportunity for normal domestic interior design. They need to be restful and beautiful, with well-designed and simple furniture : rugs, comfortable chairs, a writing table, bookcase, notice-board and pictures. In the larger schools there will be a small room for the secretary, preferably adjacent to the head teacher's room. The lavatory and coat-space for the head teacher and the rest of the staff should be near their respective rooms. (A male visitors' lavatory will be necessary in schools where all the teachers are women.) Storage for school materials and general stock will probably be most convenient near these staff rooms.

Doctor's room

The doctor's room will be used by both children and adults, and will have certain special requirements for medical inspections, such as :—

(1) a wall light point for an eye-testing chart (a door between the doctor's room and the waiting room will give the necessary 20 feet for eye testing, and economise on floor space) ;

(2) a sink with hot water ;

(3) power points for sterilizing apparatus, or for supplementary heating ;

(4) a lockable store cupboard for medical equipment ;

(5) sanitary accommodation adjacent.

There is often a need for some space where children can rest if they are not well, particularly now that so many spend all the day at school. Often they have to sit forlornly in a class space, or isolated in a staff room. Something more homely is needed, within easy reach of an adult, possibly planned as part of the medical accommodation.

Waiting space

The waiting space may, at times of inspection, be needed for quite large groups of people, but will be available all the rest of the time for other purposes. While economy has to be considered so carefully, this might be furnished as a small library (although reference books will probably be kept, as has been mentioned, in the class spaces as well). A fairly central position in the plan would be suitable for both library and waiting space ; this space need not be a separate room, but perhaps a recess off the entrance or circulation areas. The walls could have generous pin-up surfaces for charts, maps, posters or pictures ; the furniture might include bookcases, small tables and chairs, a window seat, and curtains.

Boiler house and caretaker's accommodation

The rest of the administration area is concerned with the maintenance of the building : boiler house and fuel store, meter and switchboard cupboards, storage for cleaning stock and caretaker's room.

When schools are of moderate size (as they are encouraged to be) it is quite possible to design the boiler house as an ordinary space at ground level, avoiding special construction and additional cost. If it were really efficiently designed it could, by means of explanatory diagrams of how the system works, be of considerable educational interest to the older children. The uncertainties of fuel delivery

nowadays suggest that a neat overflow storage space might be provided at the outset.

Caretakers and cleaners have their own problems which are not always considered with enough understanding. Space will be required for :—

(1) long-term storage of materials, including quite large quantities of such things as polish, saw-dust, electric light bulbs, soap, etc. ;

(2) storage of day-to-day cleaning equipment, such as brooms, buckets, mops, etc. A sink will be necessary, and if hot water is provided here the cleaners will not be tempted to use the supply in the kitchen. Coat-hanging space is also needed, as in the larger schools there may be four or five people coming in to clean ;

(3) space for the caretaker to carry out odd jobs of repair, and to have a cup of tea.

The position of these spaces in the school will of course vary with each plan arrangement, and will depend on the architect, in his imagination, carrying the buckets and cleaning the school himself. This is not the place to enlarge on methods of cleaning schools but some form of vacuum cleaning is to be encouraged. It would be simple to provide the required electric points if a decision were made in time.

If a house for a caretaker is to be provided, either initially or in the future, its siting should be carefully considered in relation to the whole layout.

The kitchen and ancillary rooms

It is not appropriate to try to discuss all the details of planning and equipment of school kitchens here, but a few points on general amenity, efficiency and cleanliness may be noted.

(1) General amenity for the staff. The staff preparing the meals will spend some considerable time in the kitchen, and there is every reason for making it a pleasant, light and airy space. The outlook is important, and early morning sun rather than mid-day sun or no sun at all will contribute to this. Colour treatment will also help, lightness and cleanliness being the two essentials here, with perhaps some small areas of brighter colours. For cold early mornings in winter some form of locally-controlled heating may be necessary to warm up the room before the cooking equipment has had time to do this.

A small office should be provided for the medium and larger canteens, and this could be furnished with a comfortable chair, a table, curtains and pin-up area for notices. There will also need to be lavatory and cloaks accommodation, however small the canteen, with a basin and hot water, a w.c., a mirror, and space for the lockers provided. Individual towels for each of the staff are very much better than one roller towel. An additional hand basin should also be fixed in the kitchen so that the staff can wash their hands even when the sinks are in use.

(2) Ventilation. It should be possible to keep the kitchen fresh, with plenty of air available during hot weather (without causing too much draught for the cooking equipment). There should be good cross ventilation at high level, and a really efficient extract system to take away smell and steam. All precautions should be taken to prevent condensation, both by ventilation and by well-insulated structural elements ; in the past much damage has been caused by damp and rust. An absorbent ceiling finish will help also to reduce the noise.

(3) Floor and wall surfaces. It is difficult to get a floor surface which is not tiring to stand on, is non-slippery, and is easy to clean. Tiles are perhaps one of the best choices, being easy to clean and

good to look at, but they are hard. It is equally important to have wall surfaces which can be easily cleaned and maintained. Glazed tiles are again probably the best, but their cost usually limits them to the vulnerable positions, for instance above the sinks, where soda splashing destroys paint. Care should be taken to avoid every unnecessary horizontal ledge or exposed pipe which collects the dirt.

(4) Equipment. The selection of individual items of equipment for school kitchens is still outside the architect's province while he has to draw from the central " pool," and he has only to follow the schedule for the particular size of kitchen he is designing. In the past, however, it has not always been easy to complete the specification and working details of the layout with accuracy, as there has been so much uncertainty about the type and make of the items that were eventually to be delivered. But now it should be possible, as soon as the order has gone through, for the architect to get full details of connections, sizes, etc.

The layout of equipment must of course be determined by the individual design conditions. Generally, the central " island " of cooking equipment with mechanical ventilation above (and floor drainage for the boiling pans and steamers) is more satisfactory than a more dispersed distribution along walls. The most efficient arrangement will be worked out on the basis of the order of the work to be carried out, the four main sequences being :

From the dry store, to the preparation tables, to the range or oven, to the hot cupboard.

From the vegetable store, to the potato peeler and vegetable sinks, to the boiling pans, to the hot cupboard.

From the hot cupboard to the service counter and dining room.

From the dining room, back to the washing-up sinks, to the china and cutlery store space.

Opinions vary about the relationship of the hot cupboard to the service counter : this must be agreed upon to suit particular preferences, though there are some disadvantages in serving directly over the cupboard.

The refrigerator is best out of the kitchen, in a cool place, with good ventilation, preferably near an outside wall. There should be easy access to it.

If the range of sinks can be on an external wall, with windows to look out of, so much the better for general amenity and probably for drainage. There is no one ideal sink height, but washers-up should not be compelled to bend constantly when lifting crockery from the bottom of the sink or when preparing vegetables. There are no standard heights for cooks, but a sink height of 2′ 10″–3′ 0″ (to the top) for a 12″–15″ deep sink should give a reasonable range. (If the height is 2′ 10″ to the top of the sink, a 1″ thick drainer resting on it and falling 1″ will result in a working surface of 3′ 0″, which is generally high enough.)

(5) Storage. Storage space will be wanted for " dry goods " (such as flour in bins, tinned foods) and perishable food (such as meat, fish, fats) ; for vegetables ; for kitchen equipment (such as steamers, pans) ; for used containers, jars and tins (until they can be removed) ; for cleaning equipment (such as brooms, buckets) ; for towels, cloths, overalls ; and for china and cutlery.

For the dry store the two essential conditions are good ventilation and coolness (with a north or east, not a south or west aspect). The lower shelf must be high enough to give access to the flour bins below, and strong enough

for heavy weighing scales ; the upper shelves must be at heights to allow space for large tins and jars. Any window openings, roof lights or ventilators should have fly-proofing material fixed over them.

For the vegetable store, access from the outside should be as direct as possible, to avoid carrying vegetables through the kitchen, and in any case there should be a door from the store to the kitchen near the potato peeler and vegetable sinks. Duckboarding on the floor will be needed for sacks of potatoes, etc., and racks, which are easy to clean, for greens and root vegetables.

The kitchen entrance

The delivery, checking and weighing of incoming goods is an important part of the work, and space should be carefully planned for this, both inside and outside the building.

There is no longer any need, however, for the entrance to the kitchen to be considered as a " back " entrance. With careful treatment (perhaps with low screen walls and planting) the dustbins and potato sludge interceptor need not be offensive. It is important to have a paved surface as direct as possible to them from the kitchen door (and a gulley for swilling down), but there is no need to have a large concrete yard which would be expensive and possibly unsightly.

SCULPTURE AND MURAL DECORATION

Local authorities are beginning to allocate a small proportion of the cost of new schools for the work of sculptors and mural painters and this is greatly to be encouraged.

With present methods of construction sculpture can contribute probably more successfully to the character of the school when it is free-standing than when it is carved into a wall surface, or placed in a special niche. It is usually good to look all round a piece of sculpture, and the backgrounds (what they are, and how far away) want careful thought ; an informal siting is often the most effective.

Mural paintings can only be really successful if the artist can co-operate with the architect in the earliest stages of the school design, and if he can fully understand the ideas behind the design. Like the treatment of colour, mural paintings should help to express and clarify the structural forms, and the character of their environment ; they should not be looked upon as " embellishments " to be added to the finished building. Space might also be allocated for children's mural work. The " professional " mural must not make the children feel that their own paintings are crude nor should it play down to them, but rather encourage them to try for themselves.

COST AND PLAN ANALYSIS

Conditions of post-war building have undergone such radical changes, and the urgency for production has been so great, that there has been as yet little opportunity for determining what are reasonable costs and reasonable allocation of space between the various parts of the school.

Final costs of schools built since the war are available in only a very few cases, so that most of the information is related to estimated cost or cost on tender. There is the further complication that cost per head varies considerably according to the size of the school : for instance a village school with a small ratio of class spaces to the other accommodation will be more expensive per head than, say, a two-form entry school.

Primary schools of seven to nine class spaces designed since the war have been working out on estimate at an average of £195 per head. A number of schools of good standard have, however, been designed for a much lower cost per head, and it should be possible, with skilful and economical planning, to design a school of seven to nine class spaces on a normal site at a cost per head of not more than £180. Indeed, as time goes on the aim must be to build more cheaply still and to raise standards at the same time. Cost per head is not an ideal yardstick, but if properly applied it is the fairest method of comparing the costs of different schools. In order to avoid confusion, which must result if different criteria are used in computing cost per head, the following method is recommended :—

The accommodation of the school is based for this purpose, on the total number of class spaces multiplied by 40.

The cost per head is based on the complete cost of building and paved playgrounds only. The following are excluded :—

Site layout and planting.

Roads, paths and fencing.

Playing field preparation.

Caretaker's and head teacher's houses.

Extra excavation and foundation work due to site levels or other difficulties.

Sewage disposal plants, pumping systems and wells.

Furniture (but built-in equipment is included).

Architect's and quantity surveyor's fees.

It is essential to make every effort not only to reduce total costs, but to ensure that the proportional allocation of cost for each part of the school bears direct relationship to its importance. There are instances where, for example, unreasonable economies have been made in floor finishes, and others where excessive expenditure has been incurred on builders' work for heating installations.

Another useful check can be made on the basis of the number of square feet per head. It may not be generally realised that in a two-form entry junior school, for example, the Building Regulations leave nearly 50 per cent. of the total area to be interpreted by each architect (i.e., administrative areas, coat-hanging space, sanitary accommodation, entrance and circulation spaces). Unskilful planning not only causes waste in these areas, but means that they cannot be used as fully as they might be. This is particularly noticeable in circulation areas, with excessive external walling, which cannot be used in conjunction with adjacent class spaces and cloakrooms. There is also waste in dining rooms if these are isolated and consequently cannot be used for other purposes in conjunction with the hall and entrance.

Architects can check their designs by a simple form of analysis as suggested in Appendix 2. The figures quoted there show what experience to date indicates as a reasonably economical allocation of space for a one-form entry junior mixed and infant school. These figures can only be taken as a very approximate guide, and will be amplified or amended as experience and analysis permit.

CONCLUSION

This bulletin concludes at the point at which it began : the importance of visualising the design of schools as a whole, and not in isolated parts. In such an intricate and complex undertaking as a school building programme, involving so many different experts (even within one local authority) before every aspect of the problem is covered, it is essential that there shall be the closest collaboration between all concerned—educators, architects, surveyors, town planners and specialist consultants. So often these experts work in water-tight compartments ; for instance, the designer of a school may never have direct access to the client for whom he is building, but may have to work through an intermediate authority ; or an administrative officer may have to order furniture and fittings without having direct contact with the architect. What is needed is a *team* of experts, with the architect responsible for maintaining a balance between all aspects, ensuring that the contribution of each specialist is properly related to the whole.

Moreover, there could be more co-operation between different education authorities. Exchange of ideas and information, and visits to other schools in course of building or already occupied, need not lead to imitation and monotony of school design, but could stimulate initiative and imagination.

The relative merits of different forms of construction that might be employed for school building have purposely not been discussed in this bulletin, but enough has probably been said to suggest that schools have a more complicated set of requirements than many existing systems of construction are designed to serve. These educational needs are not only complex, but often conflicting, and the architect's task is to simplify them without compromising them, in order that they shall be compatible with forms of construction which can be adaptable and simple, and therefore economical.

However, the relationship between adaptability of structure and costs must be carefully considered. For instance, an adaptable system of construction may in itself be more costly (though not necessarily so), but it may enable the architect to design a plan which meets the peculiar conditions of the site more exactly, and will therefore result in an overall economy.

There have been isolated examples of two-floor primary schools built since the war, but they appear to have employed either pre-war methods of construction or systems specially designed for individual schools. There will be numbers of primary schools in urban areas which will require two floors, and they will probably form a big enough programme to justify appropriate systems of construction, components for which can be manufactured in large quantities.

It will be possible to build with greater speed and economy only if those concerned with school building are willing to accept new methods of construction, administration, and co-operation with manufacturers. This approach to design and building will lead us from an emergency attitude of mind, exemplified by hutted expedients, to new architecture which is a simple and unselfconscious expression of present-day requirements. Even with the relatively small amount of experience we have had with post-war building, there is sufficient evidence to show that in fact standards can be raised without necessarily raising costs. This must be the constant objective : not only to maintain the standards which have already been achieved, but continually to improve on them, with increasing economy.

APPENDIX 1

TABLES SHOWING PLAYING FIELD AREAS FOR PRIMARY SCHOOLS

Size of playing fields

No. of pupils	No. of games played per week	No. of pitches required
100	10	1
200	20	2
etc.		

Note :

(1) The number of pitches has been worked out on a basis of 20 children to a pitch ;

(2) games provision should be sufficient to provide each pupil with at least two games per week ;

(3) to prevent over-use, it is assumed that pitches will not be used in school hours more than ten times a week.

Layout of pitches

Size of school	Approximate acreage	Winter (handball, rugby touch, shinty, football)	Summer (Rounders, cricket, etc.)
1 form entry	2	2 pitches each 70 × 50 yds.	2 sets at play (approx. 40 children).
2 form entry	3½	3 pitches 1 at 80 × 50 yds. 1 at 70 × 50 yds. 1 at 60 × 30 yds.	3 sets at play (approx. 60 children).
3 form entry	5	4 pitches 2 at 80 × 50 yds. 1 at 70 × 40 yds. 1 at 60 × 30 yds.	4 sets at play (approx. 80 children).

APPENDIX 2

EXAMPLE OF A PLAN ANALYSIS FOR A ONE-FORM ENTRY JUNIOR MIXED AND INFANTS' SCHOOL

Type of School	Education Authority	Name of School	No. of Class spaces	Date of Approval
1 F.E. J.M.I.	—	—	8	—

Accommodation	Area in sq. ft.	% of total	sq. ft. per child	Diagrammatic layout
HALL	2,569	13%	8	
MEALS SPACE	1,021	5%	3	
ENTRANCE	1,133	6%	3½	
CIRCULATION	3,799	19%	12	
CLASS SPACE	5,596	28%	17½	
CLOAKS AND LAVS. ...	2,414	12%	7½	
ADMINISTRATION ...	2,091	11%	6½	
KITCHEN	1,160	6%	4	
TOTAL AREA ...	19,783	100%	62	
TOTAL VOLUME ...	212,612 c.ft.	—	664 c.ft.	

NOTE : The freehand diagram of the plan would be drawn in coloured pencil, each part of the accommodation having the appropriate colour shown in the key (e.g., class space—yellow ; hall—red ; meals space—blue, etc.)

DEFINITIONS :

HALL ... ... Hall, stage, props, store, chair store.

MEALS SPACE ... Meals space, chair store.

ENTRANCE ... Entrance space as distinct from circulation space.

CIRCULATION ... All circulation areas, stairs, lobbies.

CLASS SPACE ... Class spaces and their stores.

CLOAKS AND LAVS... Spaces for children's coats (including drying rooms), wash-basins, closets, urinals.

ADMINISTRATION ... Teaching staff rooms ; secretary's and medical rooms ; staff cloaks and lavs., boiler house and fuel store ; stock, cleaner's, meters and tools stores.

KITCHEN ... ... Kitchen, servery stores and ancillary rooms.

NUMBER OF CHILDREN — Total number of class spaces ×40.

AREAS ... ... To centre lines of external walls and partitions.

VOLUME ... Areas to centre lines as above; heights from finished floor to ceiling.

INDEX

TDV İSAM
Kütüphanesi Arşivi
No 059-126/8

The following Government Publications are of interest to those concerned with the design and building of schools.

POST-WAR BUILDING STUDIES

No. 2. *Standard Construction for Schools.* By a Committee appointed by the President of the Board of Education. 6*d.* (7*d.*)

No. 12. *The Lighting of Buildings.* By the Lighting Committee of the Building Research Board of the Department of Scientific and Industrial Research. 2*s.* 6*d.* (2. 9*d.*)

No. 14. *Sound Insulation and Acoustics.* By the Acoustics Committee of the Building Research Board of the Department of Scientific and Industrial Research. 1*s.* (1*s.* 2*d.*)

No. 19. *Heating and Ventilation of Dwellings.* By the Heating and Ventilation Committee of the Building Research Board of the Department of Scientific and Industrial Research. 2*s.* 6*d.* (2*s.* 10*d.*)

No. 20. *Fire Grading of Buildings.* By the Fire Grading Committee of the Building Research Board of the Department of Scientific and Industrial Research, and of the Fire Offices' Committee. 1*s.* 6*d.* (1*s.* 8*d.*)

No. 21. *School Buildings for Scotland.* By a Committee appointed by the Secretary of State for Scotland. 1*s.* (1*s.* 2*d.*)

No. 24. *School Furniture and Equipment.* By a Sub-Committee of the Standards Committee of the Ministry of Works. 6*d.* (7*d.*)

No. 27. *Heating and Ventilation of Schools.* By the Heating and Ventilation (Reconstruction) Committee of the Building Research Board of the Department of Scientific and Industrial Research. 6*d.* (7*d.*)

Department of Scientific and Industrial Research. BUILDING RESEARCH PUBLICATIONS. *Technical Paper No.* 28. *Protractors for the Computation of Daylight Factors.* By A. F. Dufton. (1946) 4*d.* (5*d.*)

NATIONAL BUILDING STUDIES

These are of three kinds and further details will be supplied on request.

Bulletins—summaries of information on selected topics, not in scientific terms, but as far as possible in the form most useful for their practical application.

Special Reports—comprehensive surveys, intended for industry, dealing with a particular field of work covering research not only in the Ministry or Department concerned, but elsewhere.

Technical Papers—reports intended for scientific or technical readers on research carried out by the Ministry or Department responsible for the paper.

Prices in brackets include postage.

Obtainable from H.M. STATIONERY OFFICE at the addresses shown on cover page four or through any bookseller.

THE SWEDISH INSTITUTE
STOCKHOLM 3

TDV İSAM
Kütüphanesi Arşivi
No 059-126/9

Information Service

The Stockholm Primary School Board.

The Stockholm Primary School Board consists of fifteen members and is presided by the Civic Director (Borgarråd) for the Education Department of the City of Stockholm.

Said Board is the authoritative organ for directing the Stockholm primary schools. It has further to decide in matters concerning school buildings used for girls´schools, for intermediate schools, and for state highschools ("läroverk"). For intermediate schools and girls´schools, the Board also takes care of the economic administration. In questions of education however, highschools are directly subject to the Royal Board of Education whereas girls´schools and intermediate schools are governed by their own boards.

Trade schools are subject to a special board, i.e. the Board of Apprentice and Trade Schools, chairman being the Civic Director for the Education Department.

Certain matters are handled by special committees established by the Board. Thus, the Economy Committee decides in certain questions concerning wages, leaves of absence, school meals, clothing for school children, purchases, and in certain other economic questions. The School Building Committee decides in questions concerning the erection of new buildings and the upkeep of those existing. The Education and Certificate Committees handle certain educational matters.

The administrative organization of the Board is led by the Chief Inspector (Superintendent) who together with two further inspectors and certain other officials as e.g. departmental inspectors and consultants leads and controls the pedagogical activity at the Stockholm primary schools.

Medical care at the schools is supervised by a chief medical officer; there is also a special superintendent for mental hygiene. A chief dental officer leads the dental clinics at the schools.

The business manager heads the department of economy which comprises, among others, departments for wages, puchases, school meals, clothing for school children, and a building department under the immediate guidance of a building commissioner.

It must however be observed that the Board receives State contributions for most of its activities, and as a consequence all matters of greater importance have to be submitted to State authorities, such as e.g. all the questions regarding the curricula.

As to the organisation of the Stockholm schools, cp. the special report given below, "Public Education in Stockholm".

At present the most difficult problem for the Board as well as for the various school boards all over the country is to procure sufficient premises for the growing numbers of children. As an illustration it may be named that the number of children born at Stockholm was in 1934 somewhat over 5.000 but in 1944 nearly 15.000. It has been calculated that the number of primary school classes which is 1.407 in 1948 will rise to about 2.800 in 1956. To begin with the problem has to be solved temporarily - by renting suitable premises originally not intended for school purposes and repairing older school buildings that were to be pulled down. The great demand of new buildings cannot be satisfied at present because of restrictions in the building field.

Already some years ago Government investigations have been started with the aim of preparing a thorough school reform. In accordance with directions given by the investigation committee the Board is running certain experiments. Thus the singing classes for children with special singing talent are from class V up divided into two lines, one following the general schedule of primary schools, the other, i.e. the language line, being adapted to the schedule of the five-year lower secondary schools and comprising also a class IX which is terminated, since spring 1946, by the lower secondary school examination ("realexamen"). Another experiment has been carried on since 1947, consisting in a differentiation of primary school instruction in such a manner that in some classes English lessons are begun in class V so that this subject as well as other subjects may be studied in conformity with the schedule of lower secondary schools up to class IX, whereas the instruction given to other classes is aimed at directly preparing the pupils for future instruction in practical professions. Besides these attempts of re-organization certain experiments are being carried on in the field of methodology.

Public Education in Stockholm.

Primary Schools

Organization

The primary school in Stockholm is an eight-year school, compulsory for all those children in the age of 7-15 years who don't get full-time education in corresponding schools.

Classes I-II form the preparatory school, the training being performed by female preparatory school teachers. Classes III-VIII form the regular primary school and training is supplied by male and female primary-school teachers and by departmental teachers for drawing, singing, gymnastics, handicraft for boys, needlework and domestic science.

Boys and girls are instructed together in classes I-IV but are, as a rule, separated in classes V-VIII.

There are aid classes (hjälpklasser) for mentally retarded children. For psychopathic children observation classes are organised. Children having considerable difficulties in reading and writing, so-called "word-blind" children, are referred, for longer or shorter periods, to special reading classes. Children with considerably impaired hearing are trained in defective-hearing classes with special training supplied in labiology. Children suffering from tuberculosis in a non contagious state are assembled in open-air classes, Two hours of complete rest being part of the daily schedule. In sanatorium schools children with acute tuberculosis are being cared for and there are schools at childrens' homes and children colonies for children demanding special care on account of physical weakness or for some other reasons.

For children having special singing talent singing classes are provided. See above.

Instruction.

Handicraft (sloyd) is, for all classes, a compulsery subject. In classes I-III both boys and girls have needlework comprising sewing, knitting and darning. In classes IV-VIII girls have needlework, in class VIII called "sewing and care of clothes". Boys' handicraft in classes IV-VIII is woodwork and metalwork - to a lesser extent pasteboardwork and bookbinding - in class VIII called "workshop training".

Domestic science is included as a subject of the curriculum of the girls in classes VII and VIII. In the latter class the girls are also trained in health-care, domestic medical care and care of children.

In class VIII "domestic science" is optionable for boys and "workshop training" optionable for girls.

The entire education in class VIII is concentrated upon preparing the pupils for wage-earning on account of which great stress is laid upon professional orientation and practical work.

Pupils. Teachers.

The Stockholm primary schools list, at present, 35.000 children distributed on 1.407 classes, of which 597 preparatory school classes and 810 regular primary school classes. There are 107 special classes, namely, 54 aid classes, 11 observation classes, 30 reading classes, 5 open air classes and 7 defective-hearing classes. The average number of children per class is for normal-classes I-II 24 children, for normal-classes III-VIII 29 and for special classes 12.5. As the system of classteachers is applied, the number of preparatory school teachers and primary school teachers is corresponding to the number of classes in primary and preparatory school. In addition there are 30 headmasters of the 30 headmaster districts into which the Stockholm primary schools are divided and one headmaster for the specialclasses. The number of full-time departmental teachers is 250.

Welfare.

Since the autumn term of 1946 free school meals are available.

All pupils are granted free medical inspection and, to a limited extent, free medical attendance and free dental care.

Poor children in primary schools are also provided with clothes.

Since the spring term of 1946 all pupils have free textbooks. Stationery material as exercise-books, pencils etc. is also free in primary schools.

One fifth of the pupils of the primary schools may during the summer visit holiday camps, financed chiefly by the respective parishes and by the City of Stockholm.

In afternoons and evenings school premises are made available to young people in ages between 14 and 18 as well as to grown-ups for leisure-time activities organized by the Primary School Board. Gymnastics and athletic sports, folk-dancing etc., woodworking and modelplane construction, sewing and care of clothes, music, domestic care and cooking, care of children and nursing, scouting and typing

attract the greatest number of participants. The assembly rooms and other premises are also at the disposal of club activity; thus the schools may be characterized as a kind of community centers.

Buildings.

The primary schools of Stockholm are accommodated in about 50 school buildings of different sizes, the largest comprising 80 classrooms besides special rooms.

The school-buildings erected since the middle of the thirties are differentiated according to the functions of the different premises. A central building of 3-4 stories comprises administration premises, special rooms for science, drawing, woodwork, needlework etc., premises for libraries, medical inspection, dental care etc. and one assembly room. Attached to the central building there is a wing of 2-3 stories comprising primary school classrooms and another wing of 2 stories comprising preparatory school classrooms, each wing having a separate playground. In addition there is a detached gymnasium house, also including bath facilities.

The schools built recently have as a rule the central building designed as a large hall and comprise each c:a 40 classrooms and necessary special rooms. They also comprise a branch department of the Stockholm Public Library and in certain cases club-rooms and similar premises that make them suitable as community centers in the new suburb communities in which they are situated.

As a rule 2 % of the building costs are spent for decorative purposes.

Secondary Schools

Organization

See the survey chart.

After having passed class IV 30 % of the primary school children in Stockholm move: are transferred to five-year lower secondary schools (realskola) or seven-year high schools for girls (flickskola), in which they receive higher education, mainly of theoretical character.

A further 20 % of the primary school children are, after having passed class VI transferred either to four-year lower secondary schools (intermediate schools) or to six-year high schools for girls, having the same educational objectives as the previously mentioned lower secondary schools and high schools for girls, or to four-year practical intermediate schools (commercial, technical or domestic).

Lower secondary schools and intermediate schools are finished by the lower secondary school examination (realexamen).

The lower secondary school constitutes the basis of higher secondary schools (gymnasium) that have two sides, the classical side (latinlinjen) and the modern side (reallinjen).

They are three-year schools for pupils transferred after the lower secondary school examination and four-year schools for pupils transferred directly from the second highest class of the lower secondary school. The final examination of the higher secondary schools is the matriculation examination (studentexamen). The white cap with blue and yellow cockade is the visible sign of a successfully passed matriculation examination.

Lower secondary school (realskola) and higher secondary school (gymnasium) together form a unit, called "läroverk".

At the Technical Secondary School (Tekniska läroverket) enginaers are trained with the lower secondary school examination as a basis. To it a Technical Evening-School is connected.

The trade schools offer a multitude of training opportunities to pupils having passed the entire primary school.

Pupils. Teachers.

At present the number of pupils is

in high schools for girls	4.000
"intermediate schools	3.200
"lower secondary schools	6.400
and in higher secondary schools	3.000

The teachers of lower secondary and intermediate schools are called "adjunkt" and have, as a rule, passed the M.A. degree. The teachers of higher secondary schools are called "lektor" and have passed the Ph.D. degree.

The number of pupils at the Technical Secondary School is 700 and at the Technical Evening School 1.200.

The trade schools have - besides some thousand of grown-up students in eveningcourses - about 1.200 pupils with full-time instruction and 1.000 pupils with part-time instruction, as a rule in evenings.

Welfare provisions of the secondary schools are mainly the same as those of the primary schools.

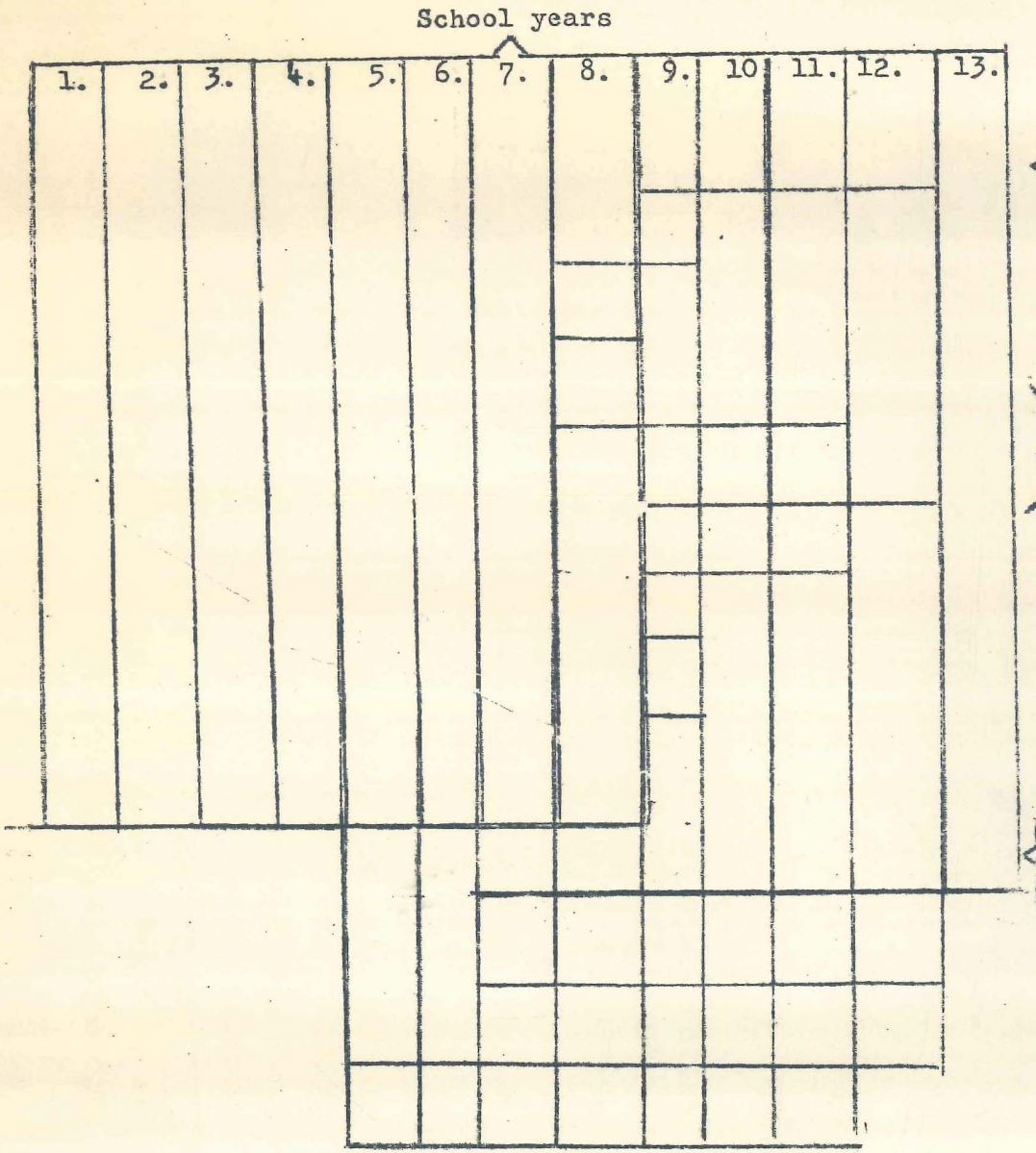
As to buildings, the same is applicable to secondary schools as to primary schools. Premises for natural science and technical subjects are, however, much more spacious in secondary schools.

Stockholm April 1948.

TDV İSAM
Kütüphanesi Arşivi
No 059-126/9

Survey Chart

THE SCHOOL ORGANIZATION OF STOCKHOLM.



Apprenticeship and trade courses of various kinds for trade, industry and domestic economy business assistants' schools

Compulsory continuation school
(for those hereto entitled)

Business assistants' schools
(The Stockholm Town Commercial Schools)

Workshop schools

Three-year commercial school } (Stockholm Town Commercial Schools)

Correspondent's course

One-year course at the Intermediate School of Domestic Economy

Eight-year compulsory primary school

Practical intermediate school
Communal intermediate school
Four-year lower secondary school } + 3-year higher secondary school

Six-year high school for girls

Five year lower secondary school + 3-year higher secondary school

Seven-year high school for girls

Schools along with wage-earning

Schools entirely absorbing pupils time

TDV İSAM
Kütüphanesi Arşivi
No 059-126/10

The Stockholm Primary School Board.

The Stockholm Primary School Board consists of fifteen members and is presided by the Civic Director (Borgarråd) for the Education Department of the City of Stockholm.

Said Board is the authoritative organ for directing the Stockholm primary schools. It has further to decide in matters concerning school buildings used for girls´ schools, for intermediate schools, and for state highschools ("läroverk"). For intermediate schools and girls´ schools, the Board also takes care of the economic administration. In questions of education however, highschools are directly subject to the Royal Board of Education whereas girls´ schools and intermediate schools are governed by their own boards.

Trade schools are subject to a special board, i.e. the Board of Apprentice and Trade Schools, chairman being the Civic Director for the Education Department.

Certain matters are handled by special committees established by the Board. Thus, the Economy Committee decides in certain questions concerning wages, leaves of absence, school meals, clothing for school children, purchases, and in certain other economic questions. The School Building Committee decides in questions concerning the erection of new buildings and the upkeep of those existing. The Education and Certificate Committees handle certain educational matters.

The administrative organization of the Board is led by the Chief Inspector (Superintendent) who together with two further inspectors and certain other officials as e.g. departmental inspectors and consultants leads and controls the pedagogical activity at the Stockholm primary schools.

Medical care at the schools is supervised by a chief medical officer; there is also a special superintendent for mental hygiene. A chief dental officer leads the dental clinics at the schools.

The business manager heads the department of economy which comprises, among others, departments for wages, puchases, school meals, clothing for school children, and a building department under the immediate guidance of a building commissioner.

It must however be observed that the Board receives State contributions for most of its activities, and as a consequence all matters of greater importance have to be submitted to State authorities, such as e.g. all the questions regarding the curricula.

As to the organisation of the Stockholm schools, cp. the special report given below, "Public Education in Stockholm".

At present the most difficult problem for the Board as well as for the various school boards all over the country is to procure sufficient premises for the growing numbers of children. As an illustration it may be named that the number of children born at Stockholm was in 1934 somewhat over 5.000 but in 1944 nearly 15.000. It has been calculated that the number of primary school classes which is 1.407 in 1948 will rise to about 2.800 in 1956. To begin with the problem has to be solved temporarily - by renting suitable premises originally not intended for school purposes and repairing older school buildings that were to be pulled down. The great demand of new buildings cannot be satisfied at present because of restrictions in the building field.

Already some years ago Government investigations have been started with the aim of preparing a thorough school reform. In accordance with directions given by the investigation committee the Board is running certain experiments. Thus the singing classes for children with special singing talent are from class V up divided into two lines, one following the general schedule of primary schools, the other, i.e. the language line, being adapted to the schedule of the five-year lower secondary schools and comprising also a class IX which is terminated, since spring 1946, by the lower secondary school examination ("realexamen"). Another experiment has been carried on since 1947, consisting in a differentiation of primary school instruction in such a manner that in some classes English lessons are begun in class V so that this subject as well as other subjects may be studied in conformity with the schedule of lower secondary schools up to class IX, whereas the instruction given to other classes is aimed at directly preparing the pupils for future instruction in practical professions. Besides these attempts of re-organization certain experiments are being carried on in the field of methodology.

Public Education in Stockholm.

Primary Schools

Organization

The primary school in Stockholm is an eight-year school, compulsory for all those children in the age of 7-15 years who don't get full-time education in corresponding schools.

Classes I-II form the preparatory school, the training being performed by female preparatory school teachers. Classes III-VIII form the regular primary school and training is supplied by male and female primary-school teachers and by departmental teachers for drawing, singing, gymnastics, handicraft for boys, needlework and domestic science.

Boys and girls are instructed together in classes I-IV but are, as a rule, separated in classes V-VIII.

There are aid classes (hjälpklasser) for mentally retarded children. For psychopathic children observation classes are organized. Children having considerable difficulties in reading and writing, so-called "word-blind" children, are referred, for longer or shorter periods, to special reading classes. Children with considerably impaired hearing are trained in defective-hearing classes with special training supplied in labiology. Children suffering from tuberculosis in a non contagious state are assembled in open-air classes, two hours of complete rest being part of the daily schedule. In sanatorium schools children with acute tuberculosis are being cared for and there are schools at childrens' homes and children colonies for children demanding special care on account of physical weakness or for some other reasons.

For children having special singing talent singing classes are provided. See above.

Instruction.

Handicraft (sloyd) is, for all classes, a compulsory subject. In classes I-III both boys and girls have needlework comprising sewing, knitting and darning. In classes IV-VIII girls have needlework, in class VIII called "sewing and care of clothes". Boys' handicraft in classes IV-VIII is woodwork and metalwork - to a lesser extent pasteboardwork and bookbinding - in class VIII called "workshop training".

Domestic science is included as a subject of the curriculum of the girls in classes VII and VIII. In the latter class the girls are also trained in health-care, domestic medical care and care of children.

In class VIII "domestic science" is optionable for boys and "workshop training" optionable for girls.

The entire education in class VIII is concentrated upon preparing the pupils for wage-earning on account of which great stress is laid upon professional orientation and practical work.

Pupils. Teachers.

The Stockholm primary schools list, at present, 35.500 children distributed on 1.407 classes, of which 597 preparatory school classes and 810 regular primary school classes. There are 107 special classes, namely, 54 aid classes, 11 observation classes, 30 reading classes, 5 open air classes and 7 defective-hearing classes. The average number of children per class is for normal-classes I-II 24 children, for normal-classes III-VIII 29 and for special classes 12.5. As the system of classteachers is applied, the number of preparatory school teachers and primary school teachers is corresponding to the number of classes in primary and preparatory school. In addition there are 30 headmasters of the 30 headmaster districts into which the Stockholm primary schools are divided and one headmaster for the specialclasses. The number of full-time departmental teachers is 250.

Welfare.

Since the autumn term of 1946 free school meals are available.

All pupils are granted free medical inspection and, to a limited extent, free medical attendance and free dental care.

Poor children in primary schools are also provided with clothes.

Since the spring term of 1946 all pupils have free textbooks. Stationery material as exercise-books, pencils etc. is also free in primary schools.

One fifth of the pupils of the primary schools may during the summer visit holiday camps, financed chiefly by the respective parishes and by the City of Stockholm.

In afternoons and evenings school premises are made available to young people in ages between 14 and 18 as well as to grown-ups for leisure-time activities organized by the Primary School Board. Gymnastics and athletic sports, folk-dancing etc., woodworking and model-

plane construction, sewing and care of clothes, music, domestic care and cooking, care of children and nursing, scouting and typing attract the greatest number of participants. The assembly rooms and other premises are also at the disposal of club activity; thus the schools may be characterized as a kind of community centers.

Buildings.

The primary schools of Stockholm are accommodated in about 50 school buildings of different sizes, the largest comprising 80 classrooms besides special rooms.

The school-buildings erected since the middle of the thirties are differentiated according to the functions of the different premises. A central building of 3-4 stories comprises administration premises, special rooms for science, drawing, woodwork, needlework etc., premises for libraries, medical inspection, dental care etc. and one assembly room. Attached to the central building there is a wing of 2-3 stories comprising primary school classrooms and another wing of 2 stories comprising preparatory school classrooms, each wing having a separate playground. In addition there is a detached gymnasium house, also including bath facilities.

The schools built recently have as a rule the central building designed as a large hall and comprise each c:a 40 classrooms and necessary special rooms. They also comprise a branch department of the Stockholm Public Library and in certain cases club-rooms and similar premises that make them suitable as community centers in the new suburb communities in which they are situated.

As a rule 2 % of the building costs are spent for decorative purposes.

Secondary Schools

Organization

See the survey chart.

After having passes class IV 30 % of the primary school children in Stockholm move are transferred to five-year lower secondary schools (realskola) or seven-year high schools for girls (flickskola), in which they receive higher education, mainly of theoretical character.

A further 20 % of the primary school children are, after having passed class VI transferred either to four-year lower secondary schools (intermediate schools) or to six-year high schools for girls,

TDV İSAM
Kütüphanesi Arşivi
No osg.126/10

having the same educational objectives as the previously mentioned lower secondary schools and high schools for girls, or to four-year practical intermediate schools (commercial, technical or domestic).

Lower secondary schools and intermediate schools are finished by the lower secondary school examination (realexamen).

The lower secondary school constitutes the basis of higher secondary schools (gymnasium) that have two sides, the classical side (latinlinjen) and the modern side (reallinjen).

They are three-year schools for pupils transferred after the lower secondary school examination and four-year schools for pupils transferred directly from the second highest class of the lower secondary school. The final examination of the higher secondary schools is the matriculation examination (student-examen). The white cap with blue and yellow cockade is the visible sign of a successfully passed matriculation examination.

Lower secondary school (realskola) and higher secondary school (gymnasium) together form a unit, called "läroverk".

At the Technical Secondary School (Tekniska läroverket) engineers are trained with the lower secondary school examination as a basis. To it a Technical Evening-School is connected.

The trade schools offer a multitude of training opportunities to pupils having passed the entire primary school.

Pupils. Teachers.

At present the number of pupils is

in high schools for girls	4.000
" intermediate schools	3.200
" lower secondary schools	6.400
and in higher secondary schools	3.000

The teachers of lower secondary and intermediate schools are called "adjunkt" and have, as a rule, passed the M.A. degree. The teachers of higher secondary schools are called "lektor" and have passed the Ph.D. degree.

The number of pupils at the Technical Secondary School is 700 and at the Technical Evening School 1.200.

The trade schools have - besides some thousand of grown-up students in eveningcourses - about 1.200 pupils with full-time instruction and 1.000 pupils with part-time instruction, as a rule in evenings.

Welfare provisions of the secondary schools are mainly the same as those of the primary schools.

As to buildings, the same is applicable to secondary schools as to primary schools. Premises for natural science and technical subjects are, however, much more spacious in secondary schools.

Stockholm April 1948.

THE SWEDISH INSTITUTE
STOCKHOLM 3

TDV İSAM
Kütüphanesi Arşivi
No 059-126/11

Information Service

The Stockholm Primary School Board.

The Stockholm Primary School Board consists of fifteen members and is presided by the Civic Director (Borgarråd) for the Education Department of the City of Stockholm.

Said Board is the authoritative organ for directing the Stockholm primary schools. It has further to decide in matters concerning school buildings used for girls´schools, for intermediate schools, and for state highschools ("läroverk"). For intermediate schools and girls´schools, the Board also takes care of the economic administration. In questions of education however, highschools are directly subject to the Royal Board of Education whereas girls´schools and intermediate schools are governed by their own boards.

Trade schools are subject to a special board, i.e. the Board of Apprentice and Trade Schools, chairman being the Civic Director for the Education Department.

Certain matters are handled by special committees established by the Board. Thus, the Economy Committee decides in certain questions concerning wages, leaves of absence, school meals, clothing for school children, purchases, and in certain other economic questions. The School Building Committee decides in questions concerning the erection of new buildings and the upkeep of those existing. The Education and Certificate Committees handle certain educational matters.

The administrative organization of the Board is led by the Chief Inspector (Superintendent) who together with two further inspectors and certain other officials as e.g. departmental inspectors and consultants leads and controls the pedagogical activity at the Stockholm primary schools.

Medical care at the schools is supervised by a chief medical officer; there is also a special superintendent for mental hygiene. A chief dental officer leads the dental clinics at the schools.

The business manager heads the department of economy which comprises, among others, departments for wages, puchases, school meals, clothing for school children, and a building department under the immediate guidance of a building commissioner.

It must however be observed that the Board receives State contri butions for most of its activities, and as a consequence all matters of greater importance have to be submitted to State authorities, such as e.g. all the questions regarding the curricula.

As to the organisation of the Stockholm schools, cp. the special report given below, "Public Education in Stockholm".

At present the most difficult problem for the Board as well as for the various school boards all over the country is to procure sufficient premises for the growing numbers of children. As an illustration it may be named that the number of children born at Stockholm was in 1934 somewhat over 5.000 but in 1944 nearly 15.000. It has been calculated that the number of primary school classes which is 1.407 in 1948 will rise to about 2.800 in 1956. To begin with the problem has to be solved temporarily - by renting suitable premises originally not intended for school purposes and repairing older school buildings that were to be pulled down. The great demand of new buildings cannot be satisfied at present because of restrictions in the building field.

Already some years ago Government investigations have been started with the aim of preparing a thorough school reform. In accordance with directions given by the investigation committee the Board is running certain experiments. Thus the singing classes for children with special singing talent are from class V up divided into two lines, one following the general schedule of primary schools, the other, i.e. the language line, being adapted to the schedule of the five-year lower secondary schools and comprising also a class IX which is terminated, since spring 1946, by the lower secondary school examination ("realexamen"). Another experiment has been carried on since 1947, consisting in a differentiation of primary school instruction in such a manner that in some classes English lessons are begun in class V so that this subject as well as other subjects may be studied in conformity with the schedule of lower secondary schools up to class IX, whereas the instruction given to other classes is aimed at directly preparing the pupils for future instruction in practical professions. Besides these attempts of re-organization certain experiments are being carried on in the field of methodology.

Public Education in Stockholm.

Primary Schools

Organization

The primary school in Stockholm is an eight-year school, compulsory for all those children in the age of 7-15 years who don't get full-time education in corresponding schools.

Classes I-II form the preparatory school, the training being performed by female preparatory school teachers. Classes III-VIII form the regular primary school and training is supplied by male and female primary-school teachers and by departmental teachers for drawing, singing, gymnastics, handicraft for boys, needlework and domestic science.

Boys and girls are instructed together in classes I-IV but are, as a rule, separated in classes V-VIII.

There are aid classes (hjälpklasser) for mentally retarded children. For psychopathic children observation classes are organised. Children having considerable difficulties in reading and writing, so-called "word-blind" children, are referred, for longer or shorter periods, to special reading classes. Children with considerably impaired hearing are trained in defective-hearing classes with special training supplied in labiology. Children suffering from tuberculosis in a non contagious state are assembled in open-air classes. Two hours of complete rest being part of the daily schedule. In sanatorium schools children with acute tuberculosis are being cared for and there are schools at childrens' homes and children colonies for children demanding special care on account of physical weakness or for some other reasons.

For children having special singing talent singing classes are provided. See above.

Instruction.

Handicraft (sloyd) is, for all classes, a compulsery subject. In classes I-III both boys and girls have needlework comprising sewing, knitting and darning. In classes IV-VIII girls have needlework, in class VIII called "sewing and care of clothes". Boys' handicraft in classes IV-VIII is woodwork and metalwork - to a lesser extent pasteboardwork and bookbinding - in class VIII called "workshop training".

Domestic science is included as a subject of the curriculum of the girls in classes VII and VIII. In the latter class the girls are also trained in health-care, domestic medical care and care of children.

In class VIII "domestic science" is optionable for boys and "workshop training" optionable for girls.

The entire education in class VIII is concentrated upon preparing the pupils for wage-earning on account of which great stress is laid upon professional orientation and practical work.

Pupils. Teachers.

The Stockholm primary schools list, at present, 35.000 children distributed on 1.407 classes, of which 597 preparatory school classes and 810 regular primary school classes. There are 107 special classes, namely, 54 aid classes, 11 observation classes, 30 reading classes, 5 open air classes and 7 defective-hearing classes. The average number of children per class is for normal-classes I-II 24 children, for normal-classes III-VIII 29 and for special classes 12.5. As the system of classteachers is applied, the number of preparatory school teachers and primary school teachers is corresponding to the number of classes in primary and preparatory school. In addition there are 30 headmasters of the 30 headmaster districts into which the Stockholm primary schools are divided and one headmaster for the specialclasses. The number of full-time departmental teachers is 250.

Welfare.

Since the autumn term of 1946 free school meals are available.

All pupils are granted free medical inspection and, to a limited extent, free medical attendance and free dental care.

Poor children in primary schools are also provided with clothes.

Since the spring term of 1946 all pupils have free textbooks. Stationery material as exercise-books, pencils etc. is also free in primary schools.

One fifth of the pupils of the primary schools may during the summer visit holiday camps, financed chiefly by the respective parishes and by the City of Stockholm.

In afternoons and evenings school premises are made available to young people in ages between 14 and 18 as well as to grown-ups for leisure-time activities organized by the Primary School Board. Gymnastics and athletic sports, folk-dancing etc., woodworking and modelplane construction, sewing and care of clothes, music, domestic care and cooking, care of children and nursing, scouting and typing

attract the greatest number of participants. The assembly rooms and other premises are also at the disposal of club activity; thus the schools may be characterized as a kind of community centers.

Buildings.

The primary schools of Stockholm are accommodated in about 50 school buildings of different sizes, the largest comprising 80 classrooms besides special rooms.

The school-buildings erected since the middle of the thirties are differentiated according to the functions of the different premises. A central building of 3-4 stories comprises administration premises, special rooms for science, drawing, woodwork, needlework etc., premises for libraries, medical inspection, dental care etc. and one assembly room. Attached to the central building there is a wing of 2-3 stories comprising primary school classrooms and another wing of 2 stories comprising preparatory school classrooms, each wing having a separate playground. In addition there is a detached gymnasium house, also including bath facilities.

The schools built recently have as a rule the central building designed as a large hall and comprise each c:a 40 classrooms and necessary special rooms. They also comprise a branch department of the Stockholm Public Library and in certain cases club-rooms and similar premises that make them suitable as community centers in the new suburb communities in which they are situated.

As a rule 2 % of the building costs are spent for decorative purposes.

Secondary Schools

Organization

See the survey chart.

After having passed class IV 30 % of the primary school children in Stockholm move: are transferred to five-year lower secondary schools (realskola) or seven-year high schools for girls (flickskola), in which they receive higher education, mainly of theoretical character.

A further 20 % of the primary school children are, after having passed class VI transferred either to four-year lower secondary schools (intermediate schools) or to six-year high schools for girls, having the same educational objectives as the previously mentioned lower secondary schools and high schools for girls, or to four-year practical intermediate schools (commercial, technical or domestic).

Lower secondary schools and intermediate schools are finished by the lower secondary school examination (realexamen).

The lower secondary school constitutes the basis of higher secondary schools (gymnasium) that have two sides, the classical side (latinlinjen) and the modern side (reallinjen).

They are three-year schools for pupils transferred after the lower secondary school examination and four-year schools for pupils transferred directly from the second highest class of the lower secondary school. The final examination of the higher secondary schools is the matriculation examination (studentexamen). The white cap with blue and yellow cockade is the visible sign of a successfully passed matriculation examination.

Lower secondary school (realskola) and higher secondary school (gymnasium) together form a unit, called "läroverk".

At the Technical Secondary School (Tekniska läroverket) enginaers are trained with the lower secondary school examination as a basis. To it a Technical Evening-School is connected.

The trade schools offer a multitude of training opportunities to pupils having passed the entire primary school.

Pupils. Teachers.

At present the number of pupils is

in high schools for girls	4.000
"intermediate schools	3.200
"lower secondary schools	6.400
and in higher secondary schools	3.000

The teachers of lower secondary and intermediate schools are called "adjunkt" and have, as a rule, passed the M.A. degree. The teachers of higher secondary schools are called "lektor" and have passed the Ph.D. degree.

The number of pupils at the Technical Secondary School is 700 and at the Technical Evening School 1.200.

The trade schools have - besides some thousand of grown-up students in eveningcourses - about 1.200 pupils with full-time instruction and 1.000 pupils with part-time instruction, as a rule in evenings.

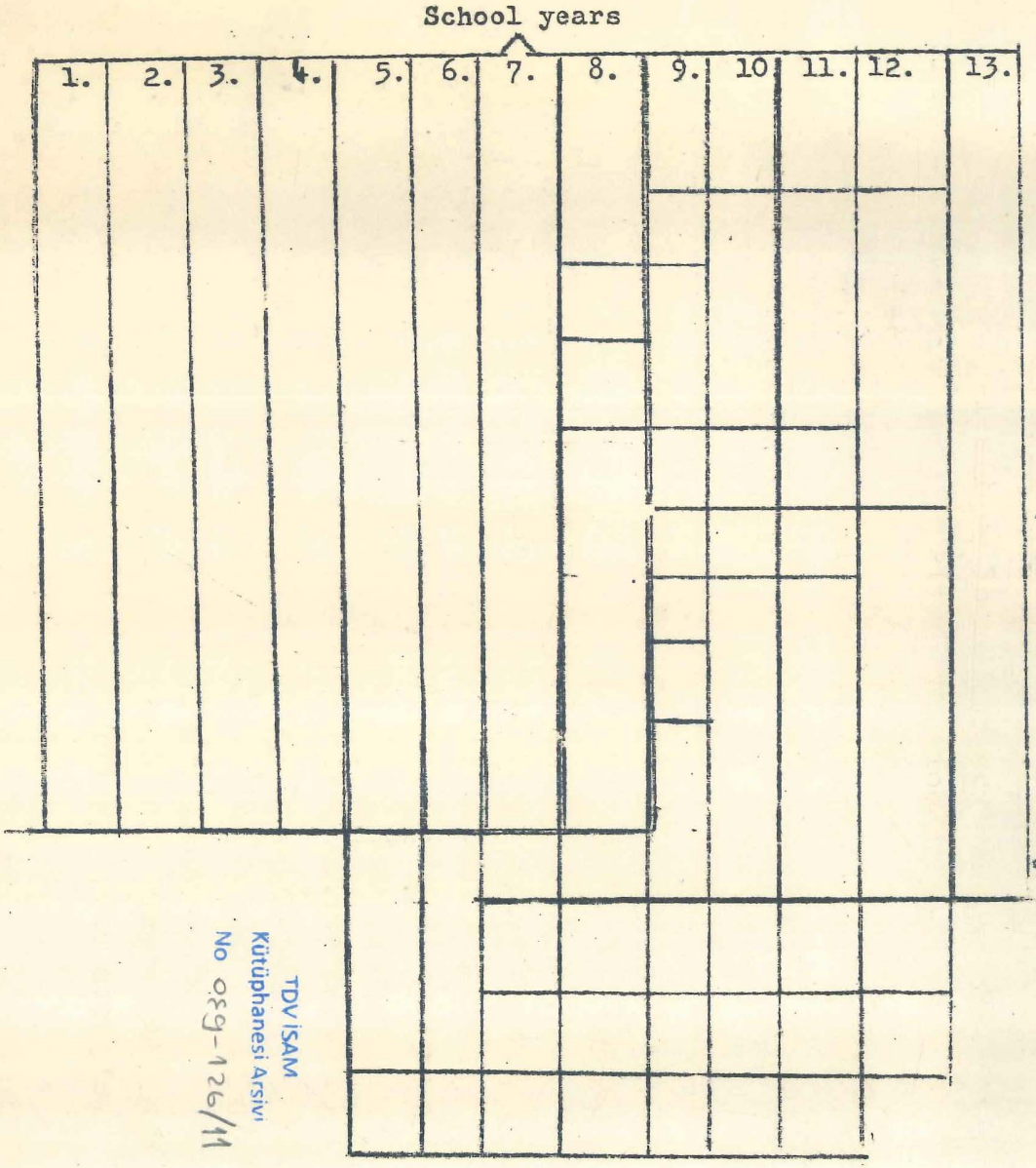
Welfare provisions of the secondary schools are mainly the same as those of the primary schools.

As to buildings, the same is applicable to secondary schools as to primary schools. Premises for natural science and technical subjects are, however, much more spacious in secondary schools.

Stockholm April 1948.

Survey Chart

THE SCHOOL ORGANIZATION OF STOCKHOLM.



Apprenticeship and trade courses of various kinds for trade, industry and domestic economy business assistants' schools

Compulsory continuation school
(for those hereto entitled)

Business assistants' schools
(The Stockholm Town Commercial Schools)

Workshop schools

Three-year commercial school } (Stockholm Town Commercial Schools)

Correspondent's course

One-year course at the Intermediate School of Domestic Economy

Eight-year compulsory primary school

Practical intermediate school
Communal intermediate school
Four-year lower secondary school } + 3-year higher secondary school

Six-year high school for girls

Five year lower secondary school + 3-year higher secondary school

Seven-year high school for girls

Schools along with wage-earning

Schools entirely absorbing pupils time

TDV İSAM
Kütüphanesi Arşivi
No 039-126/11