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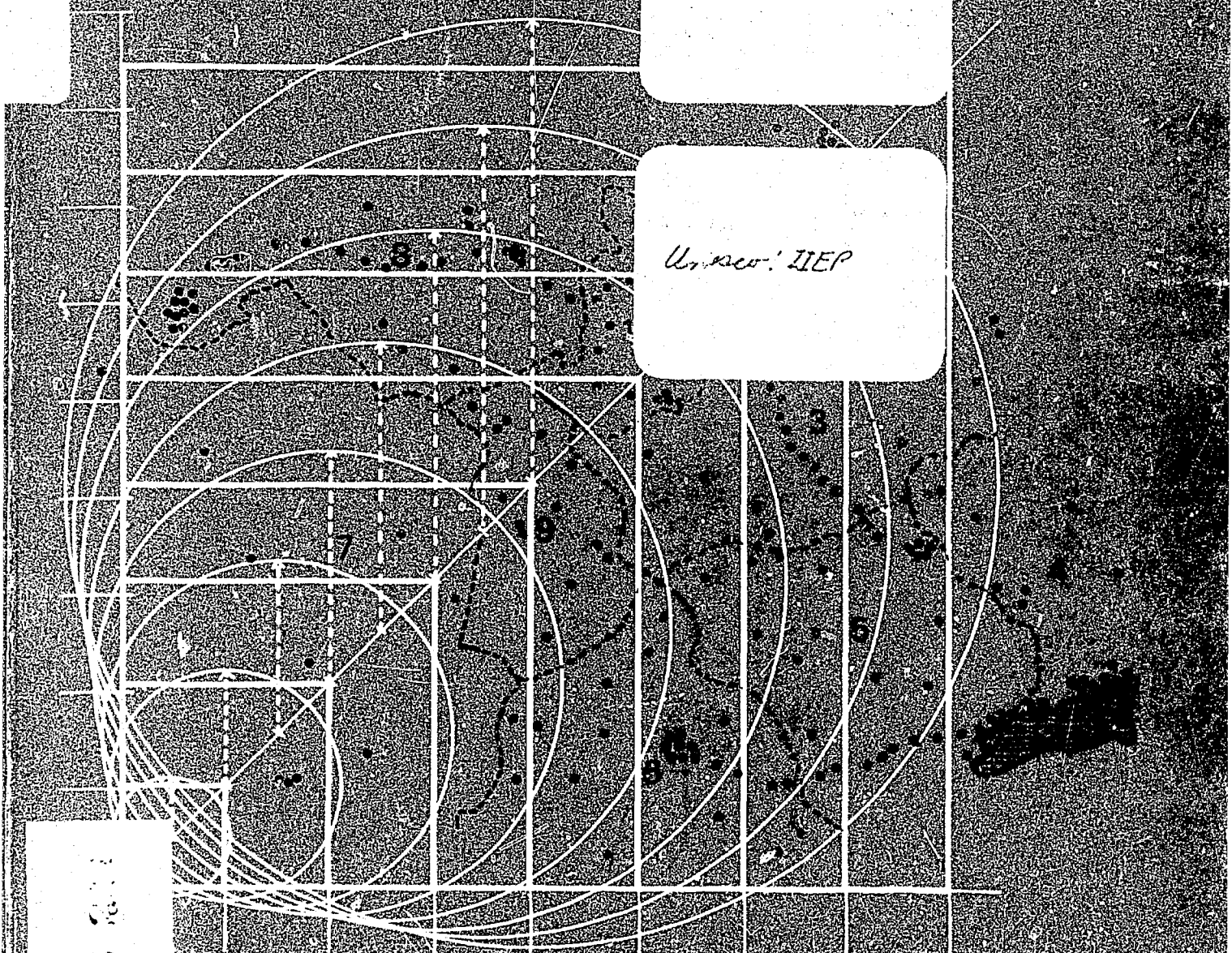
ABSTRACT

This case study highlights a typical example of the kind of gap that exists between centralized planning and implementation. Despite the existence of fairly sophisticated central planning machinery in Ireland and an active desire for reform on the part of the government (with an explicit policy on school location, buildings, curriculum, etc.), the school networks in the County still remain largely outdated and ill-adapted to modern circumstances. This situation results in costly under utilization of resources, a lack of equality of educational opportunity and supply, and inadequate pedagogical provision. The County is highlighted geographically and placed comparatively in the Irish context under the headings of demography, economic and social background, and educational system. Profiles of the school networks are given, and an analysis and a diagnosis are made of the first and second levels respectively. Internal comparative analysis by catchment area is made separately for the two levels under enrollment, transport, teaching staff, curriculum, physical facilities, costs, and financing. Prognoses and proposals for future school networks are made, and an enrollment forecast to 1976 is made against a background of the economic and social development perspective and the demographic trends for the County. The methodology, parameters, and principles of school mapping are presented. (Photographs may reproduce poorly.) (Author/MLF)

Planning the location of schools: case studies 1

County Sligo, Ireland

Jacques Hallak and James McCabe



Unesco: International Institute for Educational Planning

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1. County Sligo, Ireland
2. Aurich, Basse-Saxe, République fédéral d'Allemagne
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*Other titles to appear

An IIEP research project directed by Jacques Hallak

Planning the location of schools: County Sligo, Ireland

Jacques Hallak and James McCabe

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Aims and methodology of the IIEP research project on planning the location of schools

As part of the Second United Nations Development Decade, many countries have set themselves the target of providing complete first-level school coverage, or at least of substantially extending their first-level school networks, together with a major development of the network of second-level schools. Achieving these targets in practice will involve them in finding solutions to the many awkward problems which arise in setting up the network of first- and second-level schools; in other words, they will need to develop the most appropriate methods for planning the location of schools.

The International Institute for Educational Planning had these problems in view when, towards the end of 1970, it began a series of investigations into the planning of first- and second-level school location; this was research of a clearly practical kind, meeting a concrete need of most Member States; a typical example of the kind of applied research which the Institute can undertake to assist Unesco Member States in implementing their educational plans and making optimum use of the resources available. Its objective is threefold:

1. To analyse and identify all the factors—pedagogical, economic, geographical, social, administrative, political, etc.—which must be taken into account in designing a methodology for planning the location of schools;
2. To formulate such a methodology in sufficient detail to be used as a guide to school location activities in Member States, while being sufficiently flexible and universal to be adaptable to the particular conditions of each country;
3. To apply the methodology to concrete problems facing education planners, such as universal first-level education, implementation of educational reforms, etc.

The IIEP began with a number of case studies in a sample, as varied as possible, of countries in Asia, Africa, Latin America and Europe. These studies were carried out in the field with the close collaboration of the national authorities and comprised the following specific stages:

1. A critical analysis of the features of the existing network of first- and/or second-level schools, according to the purpose of the study, in one or more educational areas of 50,000 to 200,000 inhabitants, selected for the variety of problems they exhibited;
2. A study of the medium-term evolution of the potential school population, taking account of demographic factors, the educational objectives and certain socio-economic variables;
3. Proposals for rationalizing the location of schools, based on the initial findings and the educational development prospects, and on all the pedagogical, economic, geographical and other factors of general application or peculiar to the region concerned, in each case showing the relative importance of the possible decisions.

These case studies will be completed towards the end of 1973 and will be published as and when they become available.[1] A report on the project as a whole will summarize the conclusions emerging from the case studies and endeavour to identify the methodological principles of planning the location of schools; this report is expected to be completed and published in 1974.

The entire project has been financed with voluntary contributions from various countries: the Ministry of Overseas Development (United Kingdom), SIDA (Sweden), CIDA (Canada), NORAD (Norway), etc., to which the IIEP is extremely grateful.

The Institute also thanks all the Member States of Unesco and the national specialists for co-operating in the implementation of this project.

Preface

This study deals with a mainly rural area in the north-west of Ireland with a population, today, of 50,200. Its population has been in continual decline over the last hundred years with the result that a pattern of school location dating back to the middle of the nineteenth century, when the rural areas had high population densities, has become outmoded and unsuitable. The demographic decline has been accompanied by a particularly unfavourable economic and social trend which has not made it easier to modernize the network of schools, while reforms to the educational system, which were decided in 1965, call for substantial changes in the pattern of school location.

It was this special situation which guided the IIEP in selecting the Sligo area for its first case study on school location. In this study, which is in some respects a prototype, the authors have endeavoured:

1. To analyse the characteristics of the existing network of schools; this involved examining the effects of the geographical distribution of schools on attendance rates in the various districts of the county; the school transport network, movement of pupils between their homes and the schools they attend, staffing conditions, educational output, costs and various 'quality' indicators have been analysed and discussed;
2. To study the operational efficiency of the system, through an analysis of the data by size of school;
3. To test various hypotheses about the relationships between educational 'supply' and 'demand', particularly by comparing the effects of geographical location of schools on attendance rates in the areas they cover;
4. To devise a methodology with which to rationalize the existing pattern of school location with a medium- and long-term horizon. Proposals for modifying the school network have been devised, with the year 1976 in mind, in the light of the school-age population trend and its implications for costs and staff/pupil conditions.

Their analysis of the present situation highlights the inequalities between one district and another showing, in particular, (a) that participation rates vary from 27.3 per cent to 83.7 per cent for the 4 to 5 age-group and from 46 per cent to 99 per cent for the 16 to 17 age-group; (b) apparent admission rates for second-level education vary from 56 per cent to over 100 per cent; (c) the percentage of pupils residing more than two miles away from their first-level schools varies from 13 to 47 while those residing more than three miles away represent between 29 and 96 per cent according to the catchment area. There are also considerable differences in staffing conditions (pupil/teacher ratios varying from 22.5 to 35:1 in first-level education and from 11.8 to 26.6:1 for the second level), and in the condition of equipment and premises. The authors comment that:

> '... inequality of educational supply generally leads to inequality of admission to the higher-stage "science" and "technical" groups and, similarly, causes inequality between male and female pupils. Since all school network rationalization policies must attempt to equalize supply conditions, account must be taken of these factors.'

In the proposals which they have devised for rationalizing the pattern of first- and second-level school location, J. Hallak and J. McCabe have sought to 'equalize', quantitatively and qualitatively, the supply conditions by:

1. Adopting Ireland's national construction and equipment standards;
2. Suggesting that the oldest and most under-populated schools be closed down;
3. Locating schools at the 'development poles' of the area;
4. Dividing the county into new, more homogeneous catchment areas.

The authors themselves suggest that their conclusions should be regarded as a basis for negotiation among the parties concerned rather than as a basis for action. Their proposals are particularly striking:

In first-level education

> Of the 107 first-level schools in 1971, fifty-four would have to be closed down by 1976 if the national standard of a minimum of seventy-five pupils per school were to be adopted. The authors have however considered a variation in which certain single-teacher schools would be retained.
>
> Considerable savings would be obtained in most cases; alterations to the pupil/teacher ratio would largely offset transport costs. Similarly, teaching conditions would be improved by a reduction in the number of unqualified staff which would be brought about by rationalization.

Some of their proposals would still involve increases in unit costs, but it has been impossible to show in this study whether such cost increases would be justified by an improvement in the quality of the educational service.

In second-level education

Six establishments would have to close, or merge; the new network would offer a wider set of alternatives and would facilitate improved distribution of pupils among the various alternatives, particularly for technical and scientific training (25 per cent in scientific and technical studies, compared with less than 10 per cent at present).

Restructuring the network of second-level schools would have a negligible effect upon transport costs, but would offer substantial savings on salaries, thus facilitating the investment effort which their proposals would imply.

In their conclusion the authors have emphasized certain general methodological considerations arising out of this preliminary study; they show, in particular, that 'rationalization' of the pattern of school location is only possible in relation to various criteria (pedagogical, economic, social, etc.), whose application does not necessarily lead to converging conclusions and that, as a result, the choice of one or other solutions ultimately depends on the importance attached to each of the various criteria.

It would hardly have been possible to go further in this first experimental study. It is certain, nevertheless, that formulation of a more scientific methodology for the planning of school locations does presuppose that the various factors can be weighted, so that genuinely rational choices become possible; unfortunately, though, while the economic and even the social criteria can be evaluated with a fair degree of accuracy, the pedagogical criteria remain harder to pin down. In this connexion, research into the planning of school locations would have much to gain by leaning ever more heavily on the findings of enquiries to identify, in particular, the specific effects of school size on teaching efficiency.

The authors have also put forward the view that '... all rationalization proposals must aim to improve the supply in the less-favoured catchment areas'. The planning of school location is doubtless a prime tool in equalizing educational opportunities among the various areas and social categories, and the point is worth making, but this is not its only purpose.

Because of the determining influence of 'supply' upon 'demand' for education at most levels of society, distribution of the various types of second-level educational establishment is also a particularly effective instrument in orienting education to meet both the tastes and aptitudes of individuals, and the objectives which society sets for the school system. The authors have therefore laid stress in their proposals upon the importance of the geographical distribution of supply for the choices really offered to the pupils in County Sligo and for their orientation among the various sections of the second-level school. Here, however, the study by J. Hallak and J. McCabe has a somewhat special context.

In a country whose school plan lays down national targets for the development of the educational system, the planning of school locations is the method for giving concrete effect, on the ground, to all these objectives and for helping, as mentioned above, to guide the flow of pupils in the desired direction at the level of education at which specialization begins.

There was no explicit official plan in County Sligo. The authors have therefore had to confine themselves when dealing with the objectives of second-level schooling, to anticipating a development in the demand for education without reference to any objectives embodied in a plan. So this study cannot provide an example of a location policy designed to achieve the objectives, often somewhat discretionary, laid down in an education plan. Problems of this kind will recur in future projects.

What this study by J. Hallak and J. McCabe certainly does bring out, with supporting evidence, is the value of subjecting the existing structure of school networks to a critical reappraisal, and of being prepared to consider what their future should be; the study itself represents an important contribution to the methodology of school location planning and the IIEP will endeavour to build on this with the further projects it is currently pursuing.

RAYMOND POIGNANT
Director, IIEP

Contents

Introduction

1. General

A very high degree of sophistication has been achieved in the preparation of educational plans at the central level in most countries. The implementation of these plans at the regional and local levels now poses a major problem for solution.

There are numerous and complex obstacles hindering the professionally prepared central plan from successful implementation. Amongst such obstacles are the difficulty of a comprehensible and convincing communication of the plan, both to those who are charged with its implementation and to the community at large, the time-lag required to modernize obsolescent school networks and, not least, the level of administrative skill available for efficient implementation.

This case study on the county of Sligo in Ireland highlights a typical example of the kind of gap which exists between centralized planning and implementation. Despite the existence of fairly sophisticated central planning machinery in Ireland (which has the highest enrolment ratio for first- and second-level education in Western Europe) and an active desire for reform on the part of the government (with an explicit policy on school location, buildings, curriculum, etc.), the school networks in the county still remain largely outdated and ill-adapted to modern circumstances. They are aligned to demographic, economic and social patterns of the past rather than to those of the present.

Lack of effective implementation is wasteful from the economic, social and pedagogical viewpoints. There is a costly under-utilization of resources, a lack of equality of educational opportunity and of educational supply, and an inadequate pedagogical provision, especially in the smaller rural schools.

Because this situation is not unique, but common to many countries, it is all the more urgent to study techniques and strategies for bridging the gap between planning and implementation. In this respect, the development of decision-making techniques on rational school location is of priority importance. This pilot study on the county of Sligo in Ireland is accordingly meant to develop a methodology of school mapping, to test its usefulness as a technique for the general rationalization of school systems and to answer such questions for a network of schools as: how many; where; what kind; and what cost?

2. The scope of the case study

The salient feature of the network of first- and second-level schools in County Sligo, for which the foundation was laid in the mid-nineteenth century when the density of the rural population was high, is its outdatedness. It has been left behind by the demographic, economic and social development of the region, thus encouraging a lack of equal opportunity. Accordingly, the main aims of the present study are as follows:

1. To analyse the existing network of first- and second-level schools comparatively and, in particular, to examine the effects of the geographical distribution of schools on participation, transport service, staffing conditions and costs;
2. To make an enrolment forecast for 1976, and to quantify and cost the requirements in the recurrent and capital cost categories in order to develop the network and to cater for these pupils;
3. To prepare a school map for County Sligo indicating the geographic location of the modified network in the light of both long- and medium-term perspectives for the region;
4. And (on quite another plane) to act as a simulation exercise for other case studies to be made in the overall IIEP research project.

The study is confined to full-time first- and second-level education. Historical, comparative and typological analysis is retrospective to 1966 and is mainly quantitative in nature, though pedagogical and other non-quantitative aspects are considered throughout. For lack of data, cost and financing analysis is not as detailed as desired. The main focus is on the location characteristics of the school network. Neither the 'output' of the system nor its destination is examined very closely. The administrative structure and control of the system are also excluded from analysis and, at this stage, no assessment of the obstacles to implementation is undertaken.

3. The approach and structure

In Chapter I County Sligo is highlighted geographically and placed comparatively in the Irish context through collated data under the headings of demography, economic and social background and educational system.

Then in Chapters II and III profiles of the school networks are given and analysis and diagnosis are made of the first and second levels respectively. Internal comparative analysis by catchment area is made separately for the two levels under the main headings: enrolment; transport; teaching staff; curriculum; physical facilities; costs and financing.

In Chapters IV, V, VI and VII prognoses and proposals for future school networks are made. In Chapter IV an enrolment forecast to 1976 is made against a background of the economic and social development perspective and the demographic trends for the county. Proposals for the development of the first- and second-level school networks are given in Chapters V and VI. In addition to maps giving the geographical location of the modified networks, these chapters include quantification and costing of the implementation of the proposals. Although these proposals are detailed and made with reference to several factors—geographic, pedagogical, social and regional development—they are meant not as a programme for implementation but rather as a basis for discussion and negotiation between the interested parties, so that decisions may be reached and priorities ordered. In Chapter VII the main conclusions of the study are summarized.

Chapters VIII, IX and X contain the methodology, parameters and principles involved in school mapping and should be read by all those interested in the practical problems of map preparation and in the scope and limitations of this technique. Chapter VIII gives a detailed step-by-step description of the methodology used in the case study, including details on the questionnaire used, organization of the field-work, analysis of the existing school networks and the formulation of proposals for rationalization. The parameters involved in the preparation of the school map are collated on the basis of their functional relationships in Chapter IX. This chapter also includes a reference table on the pupil population densities for various catchment areas warranting the provision of schools of a certain minimum enrolment size. Then, in Chapter X, there is a discussion on the relationship between second-level school size, the provision of higher-stage subject alternatives and space utilization rates.

Complementary statistical data and bibliographic references are given in the Appendixes.

I. Background data on County Sligo

1. Economic and social data

The purpose of this introductory chapter is to highlight County Sligo and place it comparatively in the Irish national picture with regard to location, economic and social development and educational system.

It is appropriate first to place Ireland in the European setting since this country is joining the enlarged EEC (Europe of the Nine). Some comparative data are given in Table 1 (overleaf).

A gross national product (GNP) growth rate of some 4.1 per cent per year[1] was achieved during the 1958–69 period.

County Sligo covers the very scenic area known as the Yeats' Country, made world-famous by the national Nobel Prize-winning poet W. B. Yeats. The county (see Map 1) lies to the north-west of the island and has an area of 694 square miles (1,797 square kilometres), as against 26,600 (68,890) for Ireland.[2] Demographic data in Table 2 compare county and national figures, and comparative data on employment are given in Table 3.

Lacking mineral resources and located in a mountainous area on the Atlantic seaboard far from raw materials and markets, County Sligo has many economic and social problems. Land is of mixed quality and the average size of farms is too small to give a return sufficiently attractive to maintain the high percentage of population (almost 50 per cent) still engaged in agriculture. The rate of increase in employment in industry and services is not rapid enough to absorb the numbers leaving the farms and the results are rural depopulation, net migration (much of which is emigration) and a declining county population.

An over-all population decrease and rural depopulation have been continuous throughout the last hundred years. However, the rate of urbanization has increased latterly alongside the increased rate of industrialization, while the rates of population decrease and of migration from the county have slowed down correspondingly. As may be seen from Table 3, there is a gradual decrease in the rate of employment in agriculture, a sharp rise for that in industry and a levelling-out of employment in services.

1. Constant prices.
2. Excluding Northern Ireland.

2. Infrastructure

(a) Communications

Road: 220 miles (350 kilometres) of tarmac main road and 1,400 miles (2,250 k.) of tarmac secondary road; bus services to Dublin (135 miles), Belfast (129 miles), Londonderry (85 miles) and Galway (86 miles), with daily services to all major towns.

Railways: Regular services to Dublin and Limerick.

Harbour: Berths for five vessels up to 1,500 tons each and a 15-ton crane.

Airport: Proposals with planning authorities well advanced.

Post and telephone: Facilities are expanding fast; in the near future, automatic dialling will be possible to Great Britain and Europe.

(b) Social and industrial conditions

Housing: Obsolete houses are being replaced at the rate of eighty per year, (forty by the local authorities and forty by private enterprise).

Water supply: All villages will shortly have water supplies and sewerage systems.

Electric power: Fully electrified: Sligo at 148 kV, Tubbercurry at 48, Collooney at 48, Ballymote at 10 and Enniscrone at 10.

Industrial estates: Sligo Town has seventy-five acres, with other sites zoned at Ballymote and Tubbercurry.

Commercial and technical services: All main towns have commercial banking, insurance and legal services. Sligo Town has engineers, architects and accountants.

Hospitals: Sligo Town has general (230 beds), geriatric (308 beds) and psychiatric (700 beds) hospitals. There are additional private nursing homes in Sligo Town and Ballymote; there is one family doctor per 2,500 and one public health nurse per 4,000 inhabitants.

Library: A county library with 97,787 volumes (70,950 for adult and 26,837 for juvenile reading). There are about 6,130 adult and 2,815 juvenile borrowers.

Social amenities: Two golf courses at Sligo Town; one each at Ballymote and Enniscrone. There are a variety of possibilities for river, lake, sea and mountain sports and recreations.

TABLE 1. Comparative data on countries of the enlarged EEC[1]

	Pop. 1971 (millions)	Pop. growth rate p.a. %	Index of GNP *per capita* (Sweden 100)	Order of economic and social development: Econ. devel.	Energy consump. *per capita*	Transp., culture & health	Educ. effort
Belgium	9.7	0.4	63.5	1	1	6	4
Denmark	5.0	0.5	88.0	4	3	1	3
France	51.5	0.7	76.7	6	6	2	2
Federal Republic of Germany	58.9	0.4	78.9	2	4	5	6
Ireland	*3.0*	*0.7*	*50.9*	*7*	*7*	*4*	*5*
Italy	54.1	0.8	60.0	8	8	7	8
The Netherlands	13.1	1.1	89.4	5	5	8	1
U.K.	56.3	0.5	84.9	2	2	3	7

1. Figures for Luxembourg excluded

SOURCE Population: UN Population Reference Bureau
GNP Index: OECD
Ranking: F. H. Harbison, *Indices for measuring development*, Princeton University, 1969, (mimeographed)

TABLE 2. Demographic comparison of Ireland and County Sligo, 1966-71

	Ireland	County Sligo		Ireland	County Sligo
Population			*Average per annum rates per 1,000 of average population (1966-71)*		
1966	2 884 002	51 263	Births	21.4	17.1
1971	2 971 230	50 236	Deaths	11.2	14.1
Percentage change	+3.0	−2.0	Natural increase	10.1	2.9
			Net emigration	4.2	7.0
Urbanization (percentage)					
1966	48	37			
1971	52	39			

SOURCE *Census of the population of Ireland, 1971. Preliminary report*, Dublin, Stationery Office, 1971

TABLE 3. Employment structure in Ireland and County Sligo, 1966-71

	Agriculture		Industry		Services		
	Number	Percentage	Number	Percentage	Number	Percentage	Total
1966							
Ireland	333 527	31.8	293 733	27.9	438 727	41.1	1 065 987
County Sligo	9 964	52.4	2 977	15.7	6 074	31.9	19 015
1971							
Ireland	282 000	26.3	328 000	30.6	461 000	43.1	1 071 000
County Sligo	8 400	45.9	3 700	20.2	6 200	29.8	18 300

SOURCE *Census of the population of Ireland, 1966*, Vol. III, Dublin, Stationery Office, 1967
Industrial Development Authority, *Regional industrial plans, 1973-77. North-west region*, Dublin, 1972

3. Educational system and use of school mapping

Figure 1 describes the reformed structure of the Irish educational system, and gives an organizational chart for County Sligo first- and second-level schools in 1971.

First-level schools (almost exclusively public), are run by local managers (usually clergy), under the direct authority of the Department of Education in Dublin.

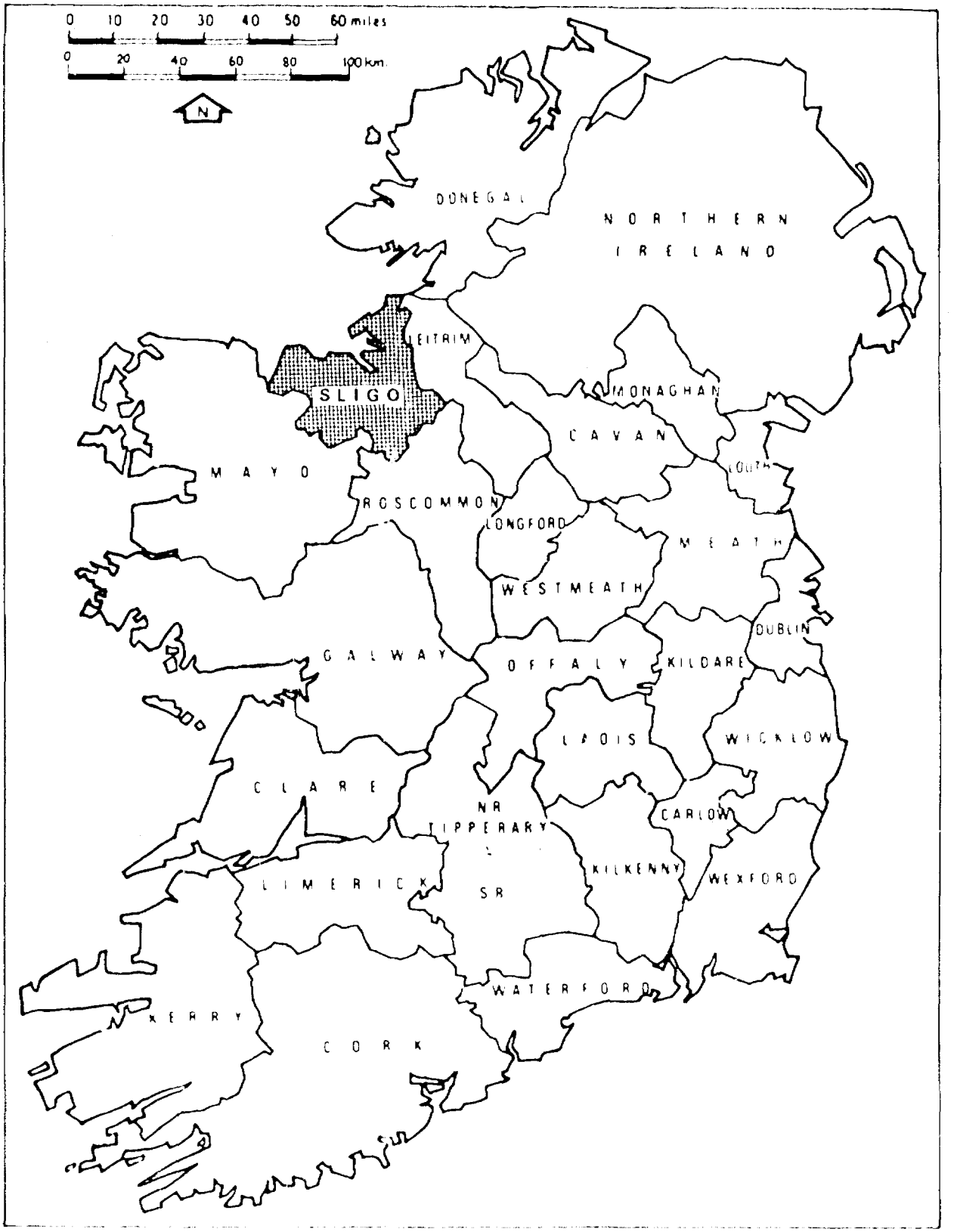
The majority of second-level schools are private (mainly religious) and are run by their managers (*principals*) in direct contact with the Department of Education. The remaining second-level schools are run by County or Urban Education Committees, consisting mainly of elected delegates; close administrative liaison is maintained with the Department of Education.

Teacher-training colleges and universities are autonomous although largely financed by the state.

Recurrent educational expenditures for the first and second levels are almost fully state-financed and the state also finances some 70 per cent of sanctioned capital expenditures. Education at both levels is available free to all without distinction. University scholarships are available, on a sliding scale based on means, for those pupils who reach a standard of four honours in the second-level leaving certificate.

Table 4 gives enrolment and public expenditure figures for Ireland and County Sligo for 1969/70 and 1970/71.[1]

1. Irish currency is tied to £ Sterling. Exchange rate, July 1972: £1 = US $2.43.



MAP 1 *The location of County Sligo*

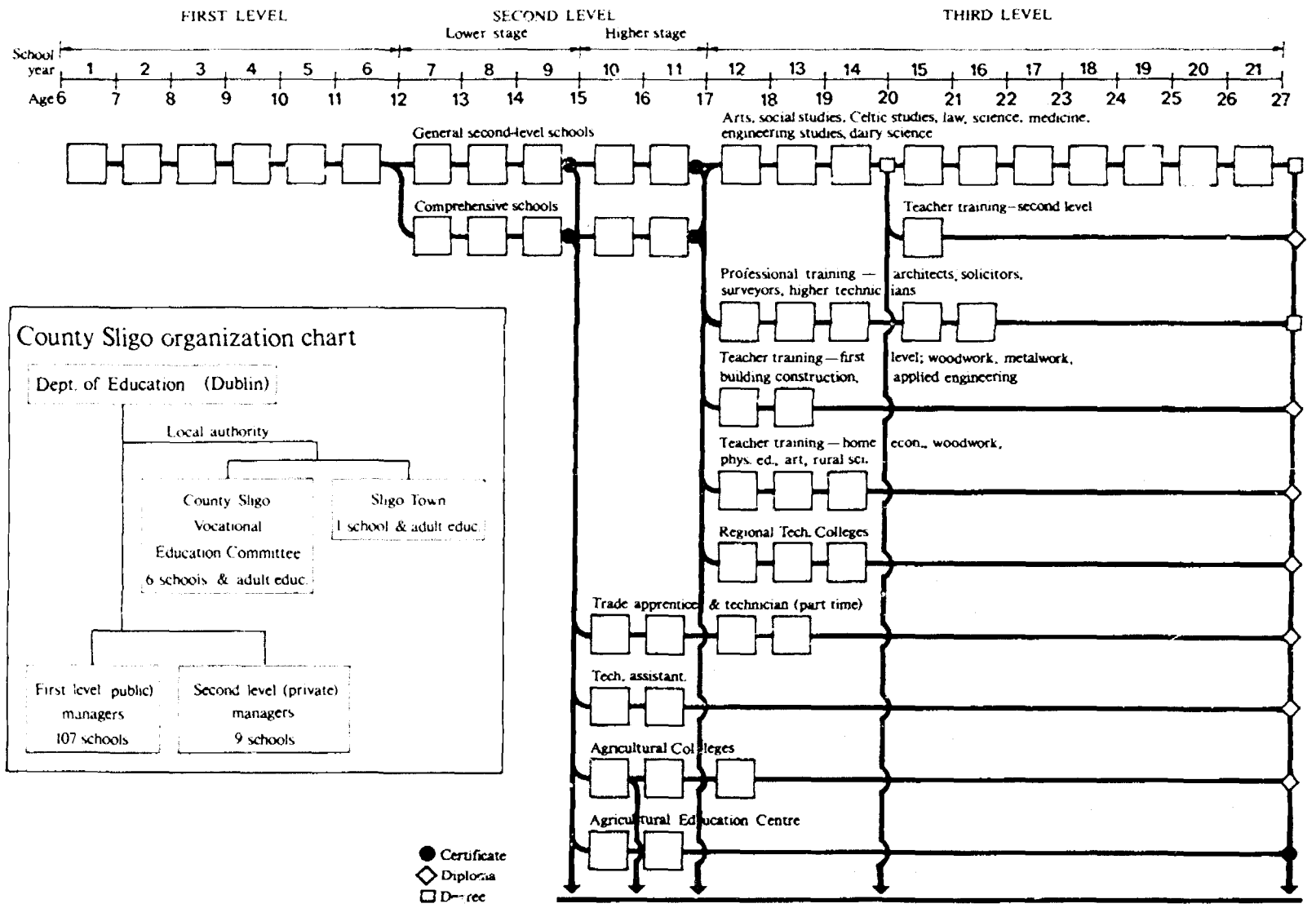


FIGURE 1. *Ireland: reformed structure of the educational system, with an organizational chart for County Sligo inset*

TABLE 4 Enrolments in Ireland and County Sligo, 1969/70; public expenditures in Ireland, 1969/70–1970/71

	Establishments		Enrolments		Thousands of £ Sterling			
					Public recurrent expenditure		Public capital expenditure	
	Ireland	Co. Sligo	Ireland	Co. Sligo	1969/70	1970/71	1969/70	1970/71
First level	4 141	118	496 429	8 219	23 948	27 985	3 828	3 670
Second level:								
Private	600	9	146 843	2 596	13 800	17 492	2 913	3 200
State comprehensive	4	—	1 354	—				
Vocational	257	7	44 155[1]	1 212				
Technical colleges	32	1	3 012	19	9 360	11 090	3 320	2 940
Higher technical colleges	14		1 733					
Teacher training (first level)	6	—	1 333	—				
Teacher training (vocational)	6	1	426	64				
University colleges	6	—	19 122[1]	—	5 209	5 507	2 512	2 000
Other aided	35	—	1 556	—	290	350	180	147
Office of the Minister	—	—	—	—	4 662	5 876	—	—
TOTAL					57 269	68 300	12 753	11 957
Percentage of GNP					3.9	4.1		

1. Full-time pupils.
SOURCE: Department of Education data, 1971.

The administrative structure of the Department of Education is shown in Figure 2. Specific responsibility for school mapping is not indicated. However, this technique is being used increasingly in central educational planning. The school map was the basic instrument employed for the administrative organization of the 'free transport scheme' introduced universally for second-level education in 1968. It was used for the precise geographical definition of second-level catchment area boundaries and decisions of eligibility on the one hand, and for the actual organization of transport routes and services on the other. Since then the school map has been used more and more for planning the introduction of reforms, rationalization and the location of schools in a co-ordinated way. It is not as yet, however, an official mandatory instrument of implementation.

4. Other educational agents

In addition to the first- and second-level school networks, providing full-time formal education, dealt with in this case study, there are also the following establishments which are located in Sligo Town: School for Mentally Handicapped Children (day/boarding, enrolment 105, mainly female); Home Economics Teacher-training College (boarding, third level, enrolment 60); Regional Technical College (day, second/third levels, opened 1970/71, target enrolment 500–700).

With increased industrialization, day and block release of apprentices for training is of growing importance in the county. The National Apprenticeship Board (ANCO) co-operates closely with the Education Committees for the organization of training in some of the Committees' schools and at Apprenticeship Training Centres elsewhere.

Responsibility for conducting day and evening vocational courses for agriculture and home management rests mainly with the County Committee of Agriculture, although the Education Committees also participate in adult education in this area.

Other educational and recreational courses are conducted by the Education Committees, University College, Galway (University of the West), and numerous voluntary organizations.

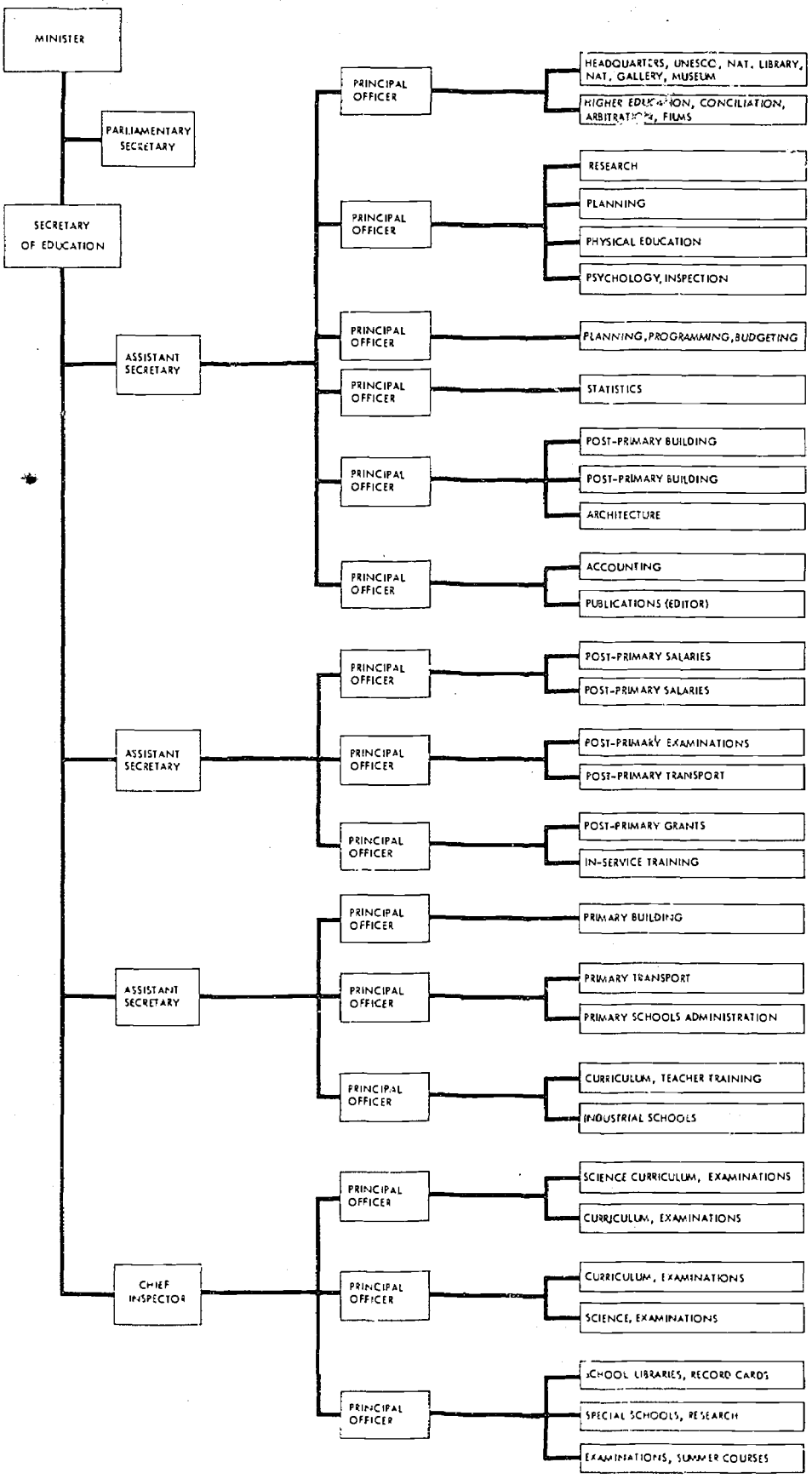


FIGURE 2. *Organization of the Department of Education*

PART ONE

II. Analysis of the first-level school network

1. Introduction: school network policy

Before describing the existing network of first-level schools in County Sligo, current Irish policy on school location can be outlined as follows:

1. The location of schools is subject to planning permission from the local authority.[1]
2. The norm for the minimum enrolment size is seventy-five; smaller schools are to be phased out, amalgamated with other schools or enlarged to reach this number. A school with an enrolment of 300–400 is preferred, with one teacher per grade and a non-teaching principal. In urban areas no maximum size is set; size and location are decided by the density of pupil population and the availability of sites.
3. To centralize consolidated rural schools in a village with growth potential, and having the required infrastructure (e.g. water, sewerage, accessibility) and situated as near as possible to the 'centre of gravity' in enrolment terms of the combined school areas.
4. When phasing consolidation, to take existing accommodation and facilities, and social, cultural and religious traditions, etc., into account.
5. To increase (or reduce) the pupil/teacher ratio towards the national norm of 35:1.
6. Detailed area and cost standards are at present being defined; it is recommended to provide a minimum of ¾ acre for a two-teacher school, with greater areas for larger schools. The norm per pupil-place is 15 sq. ft. (1.40 sq. m.) of teaching area and 32 sq. ft. (3 sq. m.) over-all; minimum-maximum 600 to 725 sq. ft. per classroom (55–67 sq. m.). A standard classroom should have forty pupil-places with one teacher per classroom.

It will be of interest to examine the wide divergence of existing schools from these criteria laid down by national policy.

2. A general outline of the first-level school network

Map 2 shows the network of first-level schools in 1970/71.[2] The pattern is that of many small scattered rural schools declining in enrolments, and a small number of large urban schools with increasing enrolments, mainly in Sligo Town.

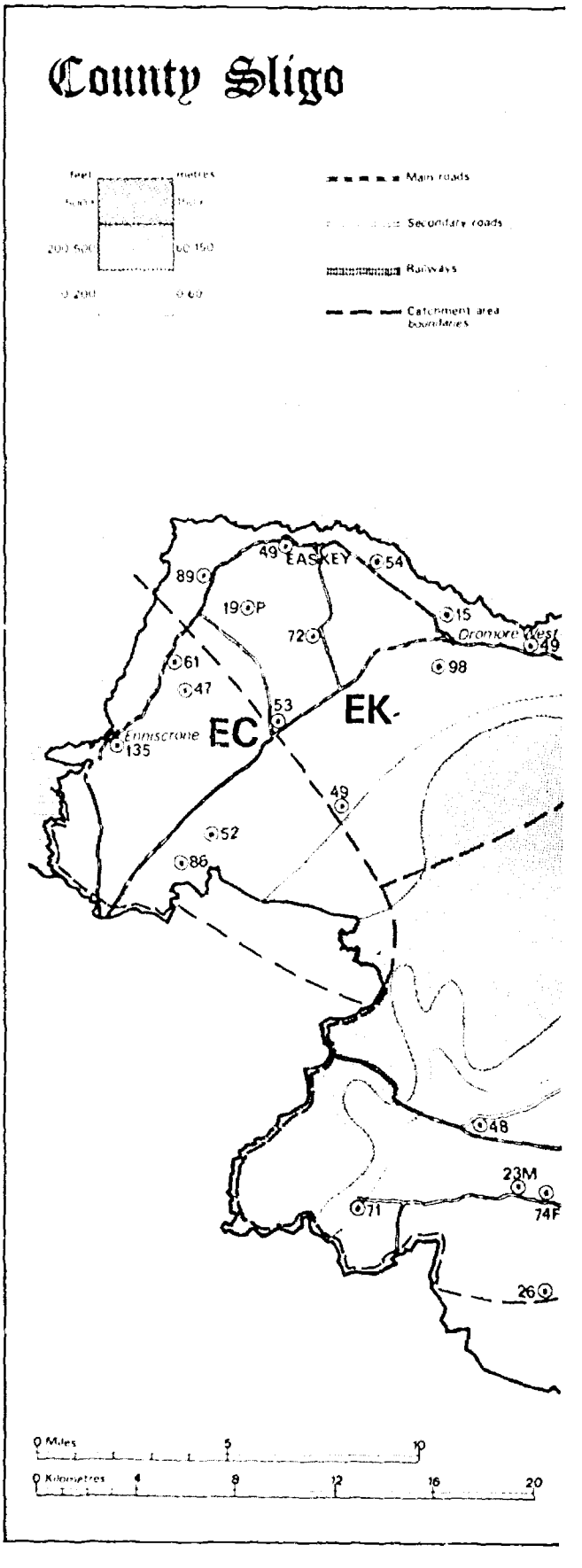
The characteristic of this distribution is explained by demographic trends since the network was first established in the middle of the nineteenth century. At that time the population was three times its present size and was over 80 per cent rural. Since then, however, the population has fallen steadily with continuous rural depopulation, migration and emigration. The population decreased from 71,388 in 1926 (with 21.5 per cent urbanization), to 51,263 in 1966 (with 37.7 per cent urbanization); the population in 1971 was 50,236.

Although twenty-eight small schools have been phased out since the mid-sixties as part of a rationalization programme, seventy-six out of the present total of 107 are still below the national enrolment-size norm of seventy-five pupils. Consequently, one of the major objectives of a future network rationalization policy would seem to be to 'consolidate' these remaining small schools.

1. See Local government (planning and development) Act, 1963. Dublin, Stationery Office, 1963.
2. It should be noted that there is also a special school for mentally handicapped children at Cregg House near Sligo Town, which is run by the La Sagesse Order. In 1970/71 enrolment was 105, with 96 girl boarders, four girls and five boys travel daily by school bus. The Department of Education and the Department of Health jointly subsidize the construction of classrooms. A specialist in child care visits the school weekly and an educational psychologist attends fortnightly.

Map 2. First-level school network, 1971

- First-level school, boys and girls
- First-level school, boys only
- First-level school, girls only
- First-level school, protestant



NOTE: An explanation of the catchment area codes is given in footnote 1, page 22.

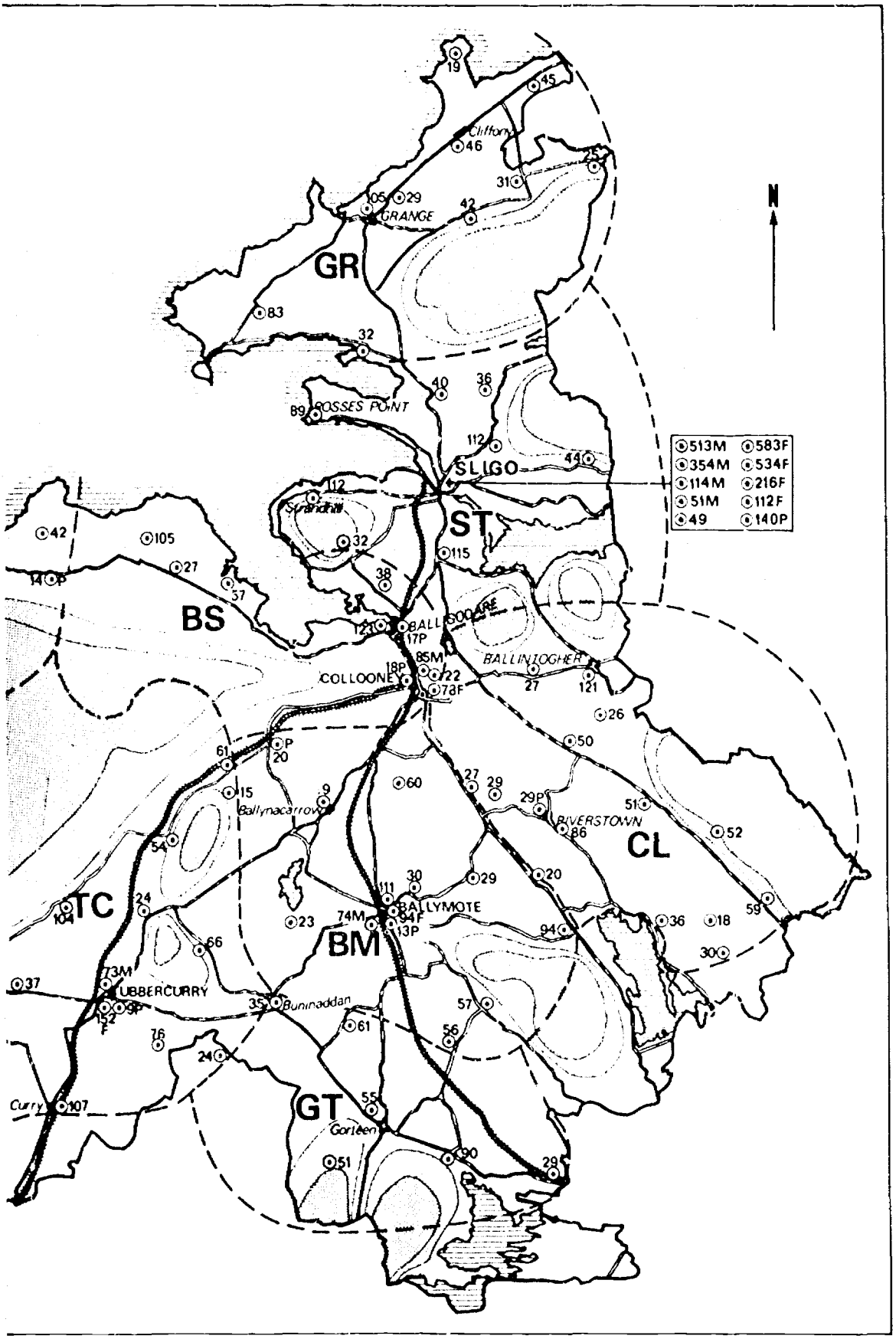

N
513M 583F
354M 534F
114M 216F
51M 112F
49 140P
SLIGO
GRANGE
ROSSES POINT
Clifford
Strandhill
BALLISODARE
COLLOONE
BALLINTOGHER
Ballynacarrow
BIVERSTOWN
BALLYMOTE
TUBBERCURRY
Bunninadden
Gorteen
Curry
GR
ST
BS
CL
TC
BM
GT

TABLE 5. First-level schools by catchment area and total enrolment, 1970/71

	< 50		50		75		100		150		200		400 +		Total	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
ST			5	201	1	81	1	89	6	705	2	570	3	1 628	18	3 244
BM	5	120	2	84	4	247	2	188	1	109					14	748
TC	6	121	2	85	7	471			2	211	1	152			18	1 040
EC			1	47	2	113	1	86	1	135					5	381
EK	3	48	4	189	3	179	2	187							12	603
BS	4	84	1	38	1	57	2	163	2	228					10	570
CL	8	206	2	86	3	162	1	86	1	121					15	661
GR	2	73	5	196	-		1	83	1	105					10	457
GT	1	29	3	167	-		1	90							5	286
TOTAL	30	681	25	1 093	21	1 280	11	972	14	1 614	3	722	3	1 628	107	7 990

1. An explanation of the catchment area codes is given in footnote 1 below.
A = number of schools B = total enrolment
SOURCE: Unless otherwise stated, the information given in the tables was obtained from an IIEP questionnaire which is described in detail in Chapter VIII.

3. Analysis of enrolment

Table 5 shows the distribution of the schools by enrolment and by catchment area.[1]

Of the 107 schools, twenty (18 per cent) have an enrolment of over 199 and account for almost 50 per cent of first-level enrolment. Five of the six largest schools are in Sligo Town and three of these have an enrolment size of over 400 pupils.

First-level schools have voluntary kindergarten classes for 4- and 5-year-olds. The pre-first-level apparent enrolment rate increased from 70 per cent in 1966 to 81.3 per cent *in 1970, as against the national increase from 66.3 per cent* to 76.7 per cent.[2]

Table 6 analyses pre-first-level participation by catchment area and a wide range can be observed: for 4-year-olds the rates range from 27.3 per cent to 83.7 per cent, and for 5-year-olds from 38.9 per cent to 100 per cent. *This range reflects the degree of urbanization of each catchment area*[3] *and already suggests the discrepancies in first- and second-level enrolment conditions.*

It is assumed that all the compulsory age-group (6–14) are enrolled at first- or second-level schools.

TABLE 6. Participation rates for 4- and 5-year-olds

Catchment area	Age group 4		Age group 5	
	Population	Participation rates (per-centages)	Population	Participation rates (per-centages)
ST	371	83.7	400	92.0
BM	79	49.4	99	76.8
TC	131	50.0	135	64.4
EC	58	43.1	51	80.4
EK	88	27.3	88	69.3
BS	66	77.3	53	100.0
GR	81	56.9	68	61.8
CL	67	79.0	65	100.0
GT	39	38.5	36	38.9

It is of interest to analyse the distribution of enrolments by grade, to check for any disparity in enrolment flows (promotion and repetition rates) and migratory movements between catchment areas. In this respect Table 7 does not, in fact, reveal any distinct trends but this may be because the data cover both large and small schools.

TABLE 7. Grades I to VI first-level flow, 1966/67–1970/71

	1966–67 Grade I	1967–68 Grade II	1968–69 Grade III	1969–70 Grade IV	1969–70 Grade V	1970–71 Grade VI
ST	399	355	358	382	432	378
BM	97	106	103	105	82	93
TC	150	144	143	148	148	164
EC	64	59	60	61	44	39
EK	104	107	101	96	76	60
BS	82	73	74	77	62	66
GR	74	70	68	71	53	48
CL	71	59	71	73	87	94
GT	48	49	57	50	39	36
Co. Sligo	1 089	1 022	1 035	1 063	1 023	978

1. Since statistics were not available beyond the quinquennium 1966/67–1970/71, it was necessary to repeat 1969/70 in order to obtain the grade V–VI flow.
2. Grade VI also includes any instances of grade VII.

Therefore, a test was made of the extent to which small schools accept repetition, either in the kindergarten classes or in grades V and VI, in order to keep their enrolments as high as possible. No trend towards repetition emerged; a normal pattern is also shown in Table 8 where the flow of enrolments is given in a sample of five schools with less than fifty pupils. Infants (or kindergarten) grades cover two age groups, but no distinct trend emerges for either retardation or repetition.

1. To simplify presentation, catchment areas are coded as follows: Sligo Town (ST), Ballymote (BM), Tubbercurry (TC), Enniscrone (EC), Easkey (EK), Ballisodare (BS), Grange (GR), Coola (CL), and Gortteen (GT).
2. This is one of the highest rates in the country and is close to those of other European countries. Some rates, from a paper presented at the OECD Conference on "Planning for education growth" (1970), are as follows (percentages):

	For 4 year-olds	For 5 year-olds
Belgium	56	[60]
France	69	95
The Netherlands	79	93
Ireland	56	91

3. Except for the CL catchment area, there is a highly significant correlation between enrolment rates and urbanization rates.

TABLE 8. Flow table for infants and grades I–III from a sample of five schools with an enrolment of less than fifty

	Infants	Grade I	Grade II	Grade III
1966/67	34	21	20	26
1967/68	35	17	21	21
1968/69	29	24	17	20
1969/70	35	15	27	20
1970/71	32	17	15	26

4. School transport facilities

By current regulation, provided a minimum of ten pupils in a school area are eligible, free transport is available for students between 4 and 10 years old living over two miles from the nearest suitable first-level school, and for pupils over 10 years of age living more than three miles away. Should a school be closed down, all the pupils are eligible for free transport to the consolidated school. Exceptional regulations are in operation for transporting protestant pupils who wish to attend schools of their own religion.

The national transport company operates the school transport scheme on behalf of the Department of Education and is reimbursed directly by the Department for an amount equal to the *actual* cost, increased by a negotiated profit margin.

Table 9 describes the transport conditions in the various catchment areas. Column four shows that in certain areas (ST, EC, BS and GR) only about one pupil in five lives over two miles from the school, as against one in four for the county as a whole, and nearly one in two in the GT catchment area.

The percentage of pupils using free school transport varies considerably by catchment area. In this respect, EK and CL seem somewhat disadvantaged as only 23.2 per cent (EK) and 25.7 per cent (CL) of pupils living over two miles away have school transport services available.

The case of Sligo Town is clearly exceptional since public transport facilities are more readily available and there is also more resort to private means of transport. In total, only 38.7 per cent of pupils living over two miles from a school are as yet actually provided with a free transport service. This fact is borne in mind when making proposals for rationalization of the existing school network.

TABLE 9. Provision of first-level transport by catchment area, 1970/71

		Pupils over 2 miles away				Pupils served by school bus						
	Enrolment	Percentage under 2 miles	Number	Percentage	Order	Number	Percentage	Order	Percentage over 2 miles	Order	Total miles	Miles per pupil
ST	3 244	79	681	21	7	146	4.5	9	21.4	8	332	2.3
BM	748	66	254	34	4	150	20.0	2	59.0	3	239	1.6
TC	1 040	67	343	33	5	179	17.2	3	52.2	4	237	1.3
EC	381	80	76	20	8	50	13.1	5	65.8	2	46	0.9
EK	603	65	211	35	3	49	8.1	8	23.2	9	103	2.1
BS	570	78	125	22	6	69	12.1	7	38.4	6	73	1.1
GR	457	87	59	13	9	71	15.5	4	100.0	1	75	0.9
CL	661	63	245	37	2	63	9.5	6	25.7	7	58	0.9
GT	286	53	134	47	1	67	23.4	1	50.0	5	42	0.6
TOTAL	7 990	73	2 128	27		844	10.6		38.7		1 205	1.4

SOURCE: *Great Northern Railway CIE, transport company data and surveys.*

5. Curriculum and teaching staff

The first-level curriculum is common to all schools. It is of interest to note that a major reform is now being undertaken, aimed at broadening the curriculum and introducing more practical subjects; a rotating curriculum revision system is also being introduced.

The teaching staff by catchment area and school size is shown in Table 10. Out of a total of 275 teachers, only twenty-one (8 per cent) are unqualified. Among the qualified teachers, fifty are religious, of whom forty-one are sisters of various orders; thirty-eight of the total work in Sligo Town.

The smaller schools (with enrolments of less than 100), which account for 50 per cent of the total enrolment, employ nearly 60 per cent of the teaching staff. Unqualified teachers are found in the smaller schools.

The average pupil teacher ratio for the county is 29:1. This ratio varies from thirty-nine for large schools with over 400 pupils to seventeen for schools of less than thirty pupils. It is of interest to note that the recommended national standard is 35:1.

Small schools are seen to have more unqualified teachers and very low pupil/teacher ratios, and both facts constitute crucial arguments in favour of the consolidation of the school network.

A tabular list of all schools by name, classified by catchment area and enrolment size (Appendix I, Tables 5 and 6), also gives a detailed profile of each school showing: 1971 enrolment; rate of enrolment and of population change in the school area 1966–71; area of grounds; number of classrooms; year in which schools were built, renovated, extended or consolidated; and the availability of mechanical services. These profiles are a fundamental source of information for the preparation of the rationalization proposals.

1 There are seven qualified teachers in the Cregg House school for mentally handicapped children, five lay and two religious. The pupil/teacher ratio is 15:1. In addition, specialist part-time teachers are employed in speech therapy, elocution, music, etc.

TABLE 10 First-level teaching staff, pupil-teacher ratio and percentage of unqualified teachers by catchment area and school size, 1971

		Enrolment							
		< 30	< 80	< 80	< 100	< 150	< 400	400 +	Total
SI	a		201	51	89	705	570	1 628	3 244
	b	—	10	2	3	21	14	42	92
	c	—	20.0	25.5	30.0	33.5	41.0	39.0	35.0
	d	—	10	0	0	0	0	0	1
BM	a	120	84	247	188	109	—	—	748
	b	7	4	9	6	3	—	—	29
	c	17	21	27	31	36	—	—	25
	d	30	25	11	0	0	—	—	15
TC	a	121	85	471	—	211	152	—	1 040
	b	9	4	17	—	8	5	—	43
	c	13.5	21	28	—	26.5	30	—	24
	d	0	0	6	—	0	0	—	2
EC	a	—	47	113	86	135	—	—	381
	b	—	2	4	3	4	—	—	13
	c	—	23.5	28.3	28.7	33.8	—	—	29.3
	d	—	0	25	0	0	—	—	7.7
EK	a	48	189	179	187	—	—	—	603
	b	4	8	7	6	—	—	—	25
	c	12	23.6	25.5	31	—	—	—	24.1
	d	0	0	14	16.5	—	—	—	10
BS	a	84	38	135	85	228	—	—	570
	b	5	2	5	2	7	—	—	21
	c	16.8	19	27	42.3	32.6	—	—	27.2
	d	25	50	0	50	28	—	—	25
GR	a	73	196	—	83	105	—	—	457
	b	3	10	—	3	4	—	—	20
	c	24.3	19.6	—	27.7	26.3	—	—	22.9
	d	0	10	—	0	0	—	—	5
CL	a	206	86	162	86	121	—	—	661
	b	12	4	6	3	4	—	—	29
	c	17.2	21.5	27	28.7	30.3	—	—	22.5
	d	16	0	0	0	25	—	—	10
GT	a	29	167	—	90	—	—	—	286
	b	2	6	—	3	—	—	—	11
	c	14.5	27.8	—	30	—	—	—	26
	d	50	16.6	—	33	—	—	—	27.3
TOTAL	A	681	1 093	1 358	894	1 614	722	1 628	7 990
	B	41	46	50	26	51	19	42	275
	C	17	24	27	31	32	38	39	29
	D	15	11	8	12	6	0	0	8
Unqualified teachers		6	5	4	3	3	—	—	21

a = enrolment, b = teachers, c = pupil-teacher ratio, d = percentage of unqualified teachers

A breakdown by age and condition shows that the schools are relatively old and ill-adapted to the reform envisaged, although many major extensions and renovations have been made recently. Latterly, increased use of pre-fabricated buildings is evident.

A significant finding from the questionnaire concerns the area per pupil and the relative size of schools. While it is not expected that area per pupil should remain constant with an increase in school size, particularly since the larger schools are mainly located in urban areas where land is scarce, nevertheless there is a certain desirable minimum unit per pupil for the provision of adequate recreational and experimental facilities. At present the area per pupil is below the desired minimum in many instances. In this respect, mixed schools requiring separate recreational facilities for boys and girls should have relatively more area per pupil. These factors must be taken into consideration (1) in the preparation of rationalization proposals to improve the present position, (2) to prevent a worsening situation in cases of amalgamation an ' (3) to have adequate site facilities for the effective introduction of the reformed curriculum mentioned above.

Teaching area per pupil varies across the county from 15 sq. ft. (1.40 sq. m.) for the large, modern schools in Sligo Town to 30 sq. ft. (2.80 sq. m.) for small rural schools. Space utilization rates, i.e. the ratio between enrolments and the number of available pupil-places, varies from 97.5 per cent in the large schools in Sligo Town to 24 per cent in

small rural schools – an additional argument for consolidation.

It was also observed that:

1. Central heating and piped water systems are better developed in larger schools than in smaller schools;
2. There is more teaching equipment and of a better quality in bigger schools;
3. Maintenance of the building and equipment is less thorough in small rural schools;
4. School libraries are generally not well developed and the stock of volumes is meagre;
5. With the exception of the use of some rural schools for adult education classes and local meetings, there is little community utilization of premises and there is no systematic policy for the intensive use of schools.

6. Some data on costs and financing

A recurrent cost analysis could not be undertaken since data from school accounts were not available. A fairly close estimate of unit costs can, however, be obtained from financing figures since the system is almost wholly state-financed and total expenditure equates approximately with total financing.

The salaries of teachers in public schools[1] are paid by the state, which also finances school transport and subsidizes other non-teacher expenditure such as maintenance, class materials, textbooks and equipment. There is no local authority financing of first-level education.

There are no tuition fees and, although there is some voluntary private financing in cash and in kind, this is relatively unimportant.

The current public financing of first-level education in Ireland in 1969/70 was £58 per pupil, excluding public financing on school transport which averages nationally at £25 per pupil carried; for County Sligo for the year ending 31 March 1971, again excluding school transport, the figure was £55 per pupil, of which £54 went on teachers' salaries.[2]

Only 844 of the total of 7,990 pupils (10.6 per cent) had free school transport in 1971, at an approximate cost of £21,100 using average figures. Thus the total unit figure of public financing per pupil in County Sligo, including school transport, was some £58, i.e. £54 (94 per cent) on teachers, £3 (5 per cent) on school transport and £1 (1 per cent) on other expenditure. However, these average figures must be treated with caution since they hide the range of unit costs between small rural and large urban schools. Even the average national transport cost figure of £25 per pupil carried gives little indication of the range of unit costs, as it covers a variety of modes of transport—private car, minibus, special school bus, public bus—and does not isolate the higher cost of travel for sparsely populated areas.

While the transport cost is fairly substantial, nevertheless at the present level of transport provision teacher cost per pupil is still overwhelmingly the major item, causing unit costs to be much higher in the smaller schools with relatively lower pupil/teacher ratios. It also seems that further public expenditure is warranted for items other than salaries and school transport.

Finally, about 70 per cent of capital costs are state-financed; the local community provides the remaining finance.

1 There are not many private first-level schools in Ireland and none in County Sligo.

2 Department of Education statistics and 1971 IIEP survey; financing from private sources is, of course, also excluded.

III. Analysis of the second-level school network

1. Introduction: school network policy

Before proceeding to analyse the school network for second-level education in the county, it is necessary to define the current policy on school location. This policy may be summarized as follows:

1. The current enrolment norms for schools providing both the lower and higher stages are 400 and 800 for rural and urban schools respectively. The norm for the maximum size is 1,500.
2. Existing schools with less than 150 pupils in regions of declining population must either be closed down or amalgamated with other schools. In this respect, co-ordination is encouraged of private and public schools and of general and vocational schools, as well as co-education.
3. While no upper limit is set on the area of school grounds, it is recommended to provide about ten acres for a second-level school having lower and higher stages.
4. In developing urban areas planners provide for schools to cater for 1,600 second-level students per 16,000 of the total population.
5. A recent reform has upgraded all vocational schools to enable pupils to take the same 'Intermediate Certificate' as those from general education. Some other large vocational schools have been upgraded to enable their pupils to take the same final examination as students attending general education schools.
6. It is intended that second-level schools should function as community schools, covering aspects of specialized part-time education, adult education and other related community services.
7. The building and location of new schools and extensions are, of course, also subject to planning permission from the local authority.

Again, as for first-level schools, upon closer examination a wide divergence will be noticed between these national criteria and the reality of the existing network.

2. A general outline of the second-level school network

Map 3 shows the network of second-level schools in 1970/71 by catchment area and type of school.

The proposed structure for the second-level educational system shown in Figure 1, page 16, with a unified system comprising general second-level and comprehensive schools, is not yet in operation in the county.

There are, in effect, two systems operating side by side. There are nine private second-level schools under the control of religious authorities, one of which (Summerhill College) could be termed comprehensive in terms of curricular alternatives provided, and the remainder general. There are seven vocational schools under the control of two vocational education committees, one for Sligo Town and the other for the remainder of the county. In the latter case the emphasis is being changed from vocational training to a comprehensive curriculum—a change hampered in some cases by the smallness of the schools.

Whereas the network of vocational schools is of relatively recent origin[1] and until recently only provided a two-year lower-stage course (with very low fees), private education is of earlier origin and has always provided the full five-year course. Before the introduction of the free second-level education scheme in 1968, fees charged in private schools were by no means negligible.

The reform or rationalization programme introduced in the 1960s sought to unify these two systems, and since 1965 all vocational schools in the county have offered the full three-year lower-stage course, while some larger vocational schools offer the complete lower- and higher-stage courses.

It is to be noted that two small schools, one in TC and the other in EC,[2] have been phased out and the private and vocational schools in Gorteen have been merged into a

1. Vocational Education Act of 1930.
2. Coolaney Vocational School (TC) and Corballa Vocational School (EC).

single school as part of the rationalization programme. *Nevertheless, only two schools in the county comply with the size standards for the county (400 to 800 pupils) and these are both in ST.* Furthermore, four schools in GR, GT, TC and CL have an enrolment of less than 150, i.e. below the minimum set by the authorities.[1]

3. Second-level enrolments

Table 11 summarizes the enrolments by school and catchment area in 1970/71. Out of a total of 4,007 pupils, 2,079 (i.e. over 50 per cent) attend five schools in Sligo Town, which vary in enrolment size from 193 to 684. The other eleven schools are scattered throughout the county and are of smaller size, i.e. 115 to 265 pupils.

With 68 per cent of enrolments, private schools account for 2,758 pupils. In addition, 85 per cent of all pupils travel daily while the remaining 15 per cent are boarders in four schools in Sligo Town and Tubbercurry. A breakdown of enrolment by sex reveals a slight majority of girls: 52 per cent of total enrolments.

A brief comparison between the enrolment figures for 1964/65 (prior to the educational reforms) and 1970/71 is of interest.

There was a large total increase (over 47 per cent) from 2,717 to 4,007. This increase originates mainly in the higher stage with 120 per cent increase as against just 30 per cent for the lower stage. The proportion going to private schools remained almost constant. The percentage of day pupils increased from 79 to 85 per cent, notably because of the introduction of a free school transport scheme.

A breakdown of enrolments between lower and higher stages reveals the latter to have increased to 29 per cent of total second-level enrolments. A breakdown by sex shows that 58 per cent of higher-stage enrolments are girls, as against 51 per cent in the lower stage. However, the most interesting data for the study of school mapping concerns the breakdown of enrolments between catchment areas.

4. Enrolments by catchment area

As is shown in Table 11, enrolment conditions vary significantly by catchment area; especially noticeable is the fact that the higher stage is much more readily available in certain areas, particularly Sligo Town.

It is also evident that private schools play a much more important role in urban than in rural areas. There are four essential reasons for these differences between the catchment areas, namely:

(a) Pupils still generally prefer to enrol in private schools providing general education and leading to third-level education, since vocational schools, which provide

1 It should also be recorded that in 1970/71 a new Regional Technical College was opened in Sligo Town.

TABLE 11. Second-level schools by enrolment and catchment area, 1970/71

		Lower stage					Higher stage					
		Day		Boarding			Day		Boarding			
		Boys	Girls	Boys	Girls	Total	Boys	Girls	Boys	Girls	Total	Grand total
SI	*Summerhill*	322	—	126	—	448	153	—	83	—	236	684
	Ursuline Conv.	—	136	—	134	270	—	72	—	100	172	442
	Mercy Convent	—	258	—	—	258	—	131	—	—	131	389
	Grammar Sch.	40	38	37	39	154	11	6	14	8	39	193
	Vocational Sch.	219	68	—	—	287	72	12	—	—	84	371
		581	500	163	173	1 417	236	221	97	108	662	2 079
BM	Mercy Convent	36	76	—	—	112	22	33	—	—	55	167
	Vocational Sch.	108	31	—	—	139	18	21	—	—	39	178
		144	107	—	—	251	40	54	—	—	94	345
TC	Marist Conv.	—	109	—	51	160	—	43	—	32	75	235
	Vocational Sch.	85	22	—	—	107	16	7	—	—	23	130
	Benada	104	74	—	—	178	33	54	—	—	87	265
		189	205	—	51	445	49	104	—	32	185	630
FC	Convent	47	87	—	—	134	14	49	—	—	63	197
FK	Vocational Sch.	101	57	—	—	158	18	18	—	—	36	194
BS	Mercy Conv.	54	82	—	—	136	13	37	—	—	50	186
GR	Vocational Sch.	53	40	—	—	93	9	13	—	—	22	115
CL	Vocational Sch.	85	48	—	—	133	—	10	—	—	10	143
GT	Vocational Sch.	37	48	—	—	85	13	20	—	—	33	118
TOTAL	1970/71	1 291	1 174	163	224	2 852	392	526	97	140	1 155	4 007
TOTAL	1968/69	1 426	957	166	203	2 752	375	301	89	125	890	3 642
TOTAL	1964/65	819	1 002	170	202	2 193	103	206	96	119	524	2 717

1 Boarding.

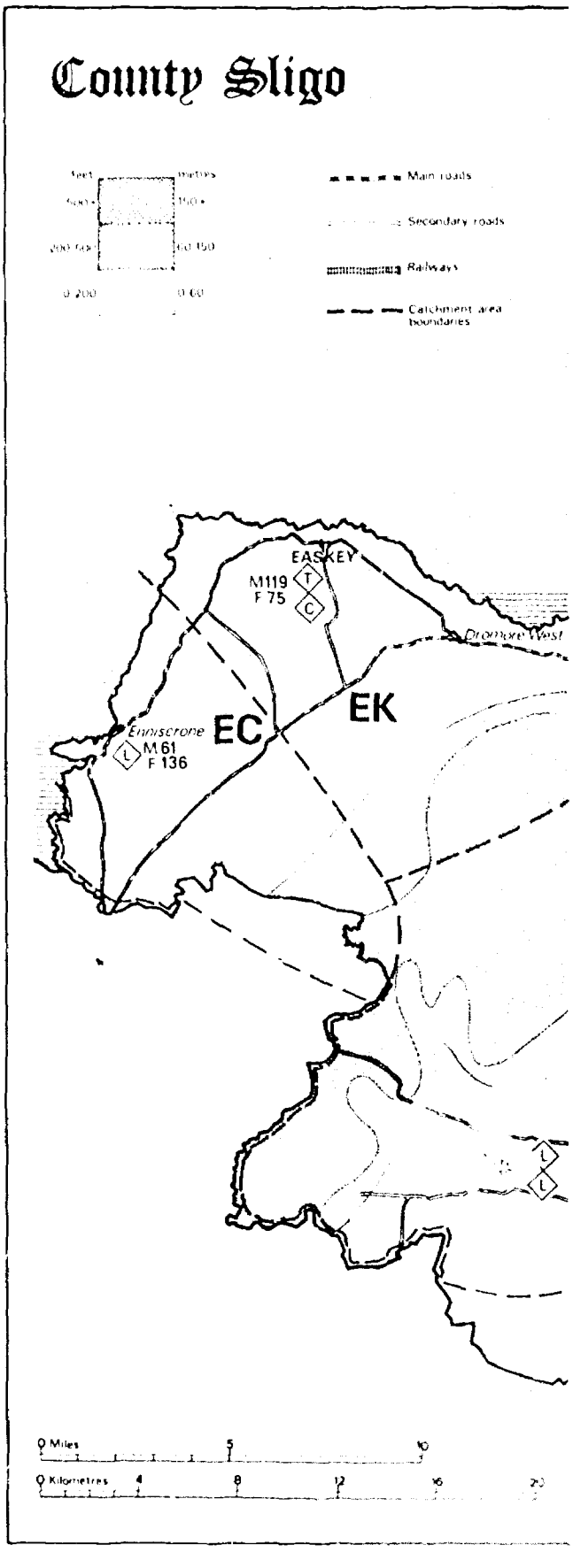
Map 3. Second-level school network, 1971

Junior centre, mixed

Higher-stage alternatives

- Languages
- Science
- Business studies
- Technical
- General (social studies)
- Commercial training[1]
- Boarding

M = boys; F = girls; P = protestant



1. This course emphasizes the practical side of pre-employment and does not constitute the full business studies course.

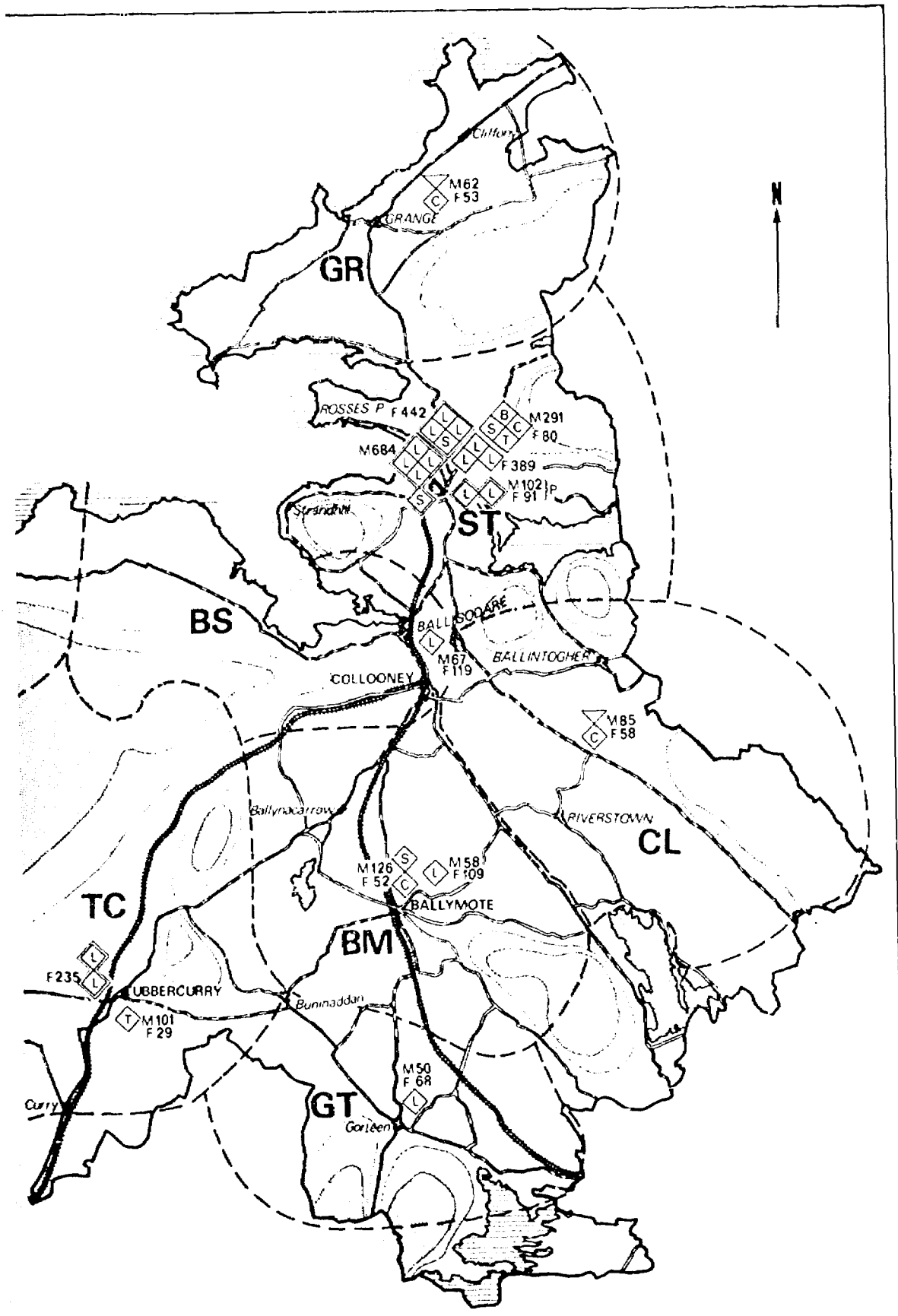

GR
ST
BS
CL
TC
BM
GT
N
M62
F53
GRANGE
ROSSES P
F442
M291
F80
M684
F389
M102
F91
Strandhill
BALLISODARE
M67
F119
BALLINTOGHER
COLLOONEY
M85
F58
Ballynacarrow
RIVERSTOWN
M126
F52
M58
F109
BALLYMOTE
F235
LUBBERCURRY
Bunnaddan
M101
F29
M50
F68
Curry
Gorteen

TABLE 12. Apparent participation rates (percentage) in second-level schools by age-group and catchment area, 1970/71

	12	13	14	15	16	17	18	15-18[1]
ST	65	135	129	134	99	73	24	83
BM	24	84	74	96	90	50	16	65
TC	19	69	85	90	78	31	9	52
EC	22	71	71	86	87	40	16	57
EK	13	41	48	54	43	19	8	31
BS	30	53	70	54	48	34	11	37
GR	10	35	39	53	46	23	..	26
CL	16	45	49	65	41	8	..	29
GT	16	56	50	77	56	26	12	43
TOTAL	34	84	86	95	76	45	14	58

1. Enrolment is negligible for 19-year-old pupils
SOURCE: Department of Education. Data and calculations from estimated 1970/71 population, based on annual birth, survival and migration rates

more practical instruction, are often attended by pupils desiring early entry to employment. The continuance of higher-stage studies is especially attractive to girls in urban areas.

(b) The reform introduced a few years ago to comprehensivise the curriculum and equate the two systems (public and private) has not yet had its full impact. Public schools have been providing higher-stage education for only a few years.

(c) Employment opportunities are better for boys than for girls, which partly explains the high participation of the latter in higher-stage education.

(d) Higher-stage education was not available in the EK, CL and GR catchment areas, explaining why their participation rates are smaller.

5. Apparent participation rates

Table 12 gives the apparent participation rates by catchment area and age-group in second-level education. These rates are negligible for the 11-year-old[1] and the 19-year-old age-groups, and have been excluded. The figures relate to the 12 to 18 age-groups and exclude any first level participation for these age-groups. The figures do not allow for the movement of pupils between catchment areas. These movements are quite important, with large flows towards ST, especially in the GR and CL catchment areas, and with flows towards EC and BS in EK. Nor does Table 12 take any account of pupils from other counties enrolled in County Sligo schools (about 400). Accordingly, the rates are overestimates, particularly for Sligo Town, and for those catchment areas where higher-stage education is provided.[2]

Despite these major provisos, the figures in Table 12 clearly illustrate the differences in the development of participation by catchment area and age-group.

For instance, for the 15 to 18 age-group as a whole, the low rates for EK, GR and CL contrast with the very high rates for ST and BM. However, the gap between the lowest rate (26) and the highest rate (83) is not quite so wide, since the former is an underestimate and the latter an overestimate. Nevertheless, these figures are a significant indication of inequality.

Generally, however, participation rates in the county are quite high and reach a maximum for the age-group 15. Rates diminish for the 16, 17 and 18 age-groups, mainly because these relate to the higher stage, where participation rates are appreciably smaller than in the lower stage.

The participation rates in Table 12 are better understood when account is taken of admission and retention rates.

6. Admission and retention rates

The current regulation for admission to the second level is that the pupil must be 11 years 8 months old by 1 September and must have completed first-level grade 6. Admission age has decreased since the introduction of the 'free transport' scheme in 1968. Table 13 gives estimates of the admission and retention rates by catchment area.

It is seen that in most catchment areas the admission rates are about unity. This is true in ST, BM, EC, EK and BS, indicating that entry to second-level education is almost automatic. The low admission rates in CL and GT should not, however, be considered as implying an appreciable difference in these catchment areas, as many of these pupils leave the county after first-level education to attend schools in the neighbouring county catchment area of Boyle.

The particularly high promotion rates for first- and second-year pupils are also caused in some cases by movements between catchment areas. Particularly noteworthy is that some pupils enrol for their second year in a vocational school having attempted a first year following the more general curricula in ST schools.

The sharp drop in retention rates in some higher stages is explained by the fact that many pupils, especially boys, enter employment at the end of the lower-stage course, and also that some schools provide only a one-year commercial training course in the higher stage. Furthermore, the higher-stage course has been introduced only recently in the vocational schools at TC, BM and EK.

In short, the figures in Table 13 reflect a number of highly complex factors, which are not necessarily always permanent in character. The main factors concerned are the migratory movements of pupils and the availability of full and diversified second-level education. Clearly, under these conditions, the urban areas show the highest partici-

1. Since most of this group comes under first-level education.
2. To be strictly correct a distinction should have been drawn between two types of catchment area: (a) for the lower stage and (b) for the higher stage.

TABLE 13. Apparent admission and promotion (retention) rates for the second level, 1971

	1 1970-71 / VI 1969-70	Rate	2 1970-71 / 1 1969-70	Rate	3 1970-71 / 2 1969-70	Rate	4 1970-71 / 3 1969-70	Rate	5 1970-71 / 4 1969-70	Rate
ST	529 / 515	1.03	475 / 491	0.97	420 / 439	0.96	344 / 398	0.86	279 / 294	0.95
BM	93 / 97	0.96	94 / 99	0.95	66 / 75	0.88	71 / 91	0.78	23 / 53	0.43
TC	136 / 166	0.82	167 / 180	0.93	143 / 149	0.96	127 / 148	0.86	65 / 89	0.73
EC	46 / 43	1.07	45 / 50	0.90	43 / 48	0.90	44 / 47	0.94	19 / 18	1.05
EK	63 / 73	0.86	62 / 68	0.91	41 / 48	0.85	25 / 33	0.76	11 / 24	0.46
BS	52 / 57	0.91	44 / 46	0.96	39 / 45	0.87	32 / 36	0.89	18 / 21	0.86
GR	35 / 49	0.71	31 / 33	1.03	27 / 39	0.69	22 / 30	0.73	— / 19	—
CL	40 / 72	0.56	47 / 52	0.90	50 / 58	0.86	10 / 42	0.24	6 / 11	—
GT	33 / 48	0.69	30 / 35	0.86	23 / 45	0.51	19 / 34	0.56	14 / 21	0.67
Co. Sligo	1 027 / 1 120	0.92	995 / 1 051	0.95	852 / 946	0.90	694 / 859	0.81	429 / 550	0.78

SOURCE: Department of Education, October lists and February census.

pation, admission and promotion rates because the full higher-stage course has been available there for a number of years already.

Finally, as with first-level enrolment, the conclusion in educational planning terminology is that *the educational supply appears to determine the effective demand.*

7. School transport

It is very difficult to describe a school transport system in detail without losing in clarity what is gained in precision. Analysis has accordingly been confined mainly to the examination of the origin and movement of pupils, especially as a function of the three-mile limit between the home and the school. Map 4 shows, beside each centre, the percentage of pupils who live within a three-mile radius of their school. This percentage is significantly correlated to the level of urbanization in that catchment area.

This map also illustrates the main movements of pupils to their schools and also between catchment areas. Movement from GR, CL and BS to ST, and from EK to EC and BS, are particularly noteworthy as these are mainly flows from catchment areas which offer (or used to offer) the lower-stage course only towards those offering the higher-stage course. However, movements of pupils are also due to earlier enrolment traditions and to the attraction of Sligo Town as the county capital.[1]

By current regulation all pupils who live over three miles

1 It should also be added that there is some movement in both directions of day-pupils between County Sligo and neighbouring counties. It has been asserted that the net result of this movement is negligible. There is also a certain amount of inter-county movement of boarders. The net balance of boarders has been estimated at 400 additional non-County Sligo pupils in the county, 320 of whom are enrolled in schools in Sligo Town.

TABLE 14. Inter-catchment area movement, 1970-71

	To ST		To BM		To TC		To EC		To EK		To BS		To GR		To CL		To GT		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
From ST																				
BM	4	4			2	3					1								7	7
TC			1																1	–
EC									19	1									19	1
EK	1						12	36			8	33							21	69
BS	35	28	2	4					2						1				40	32
GR	39	62																	39	62
CL	26	28	5	5															31	33
GT			2	8	3	7													5	15
Other counties	1	14			8	3													9	17
TOTAL	106	136	10	17	13	13	12	36	21	1	9	33			1				172	236
Lower stage	54	64	5	8	7	10	8	17	11		7	22			1				93	121
Higher stage	52	72	5	9	6	3	4	19	10	1	2	11							79	115

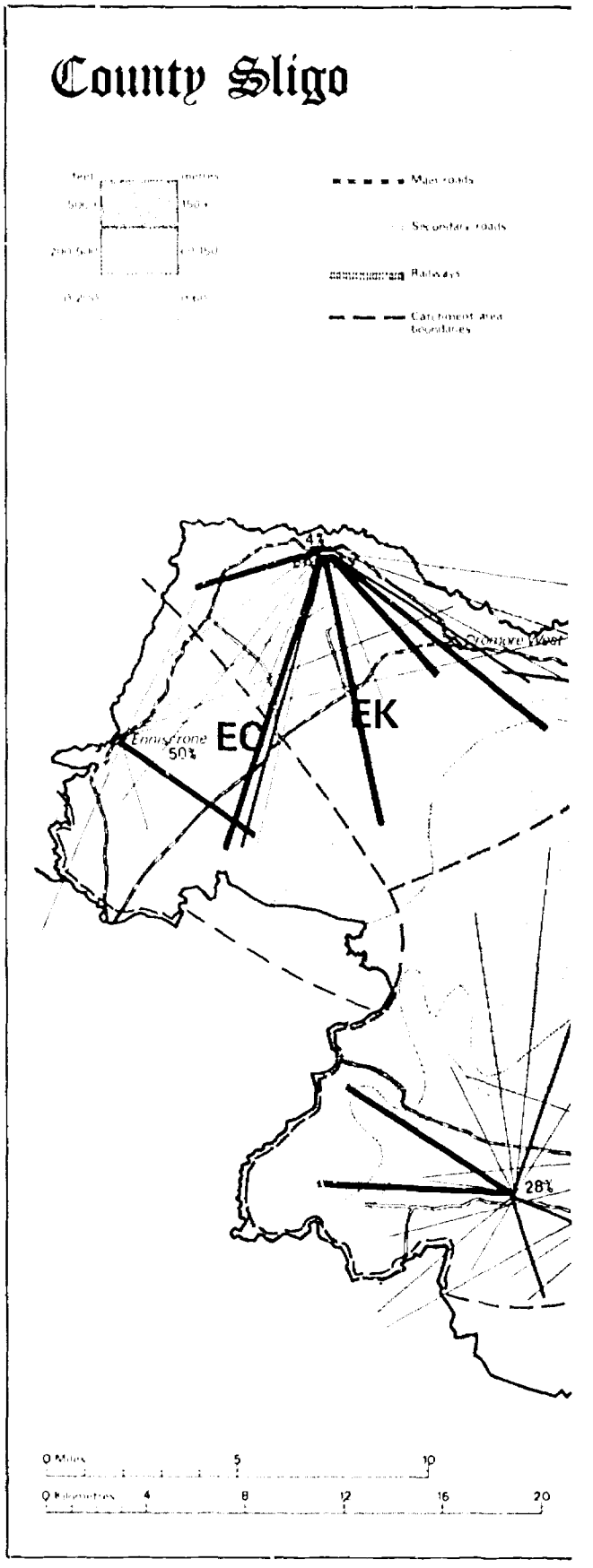
Map 4. Percentage of pupils who live within three miles of their school, and the main inter-catchment area movements, 1971

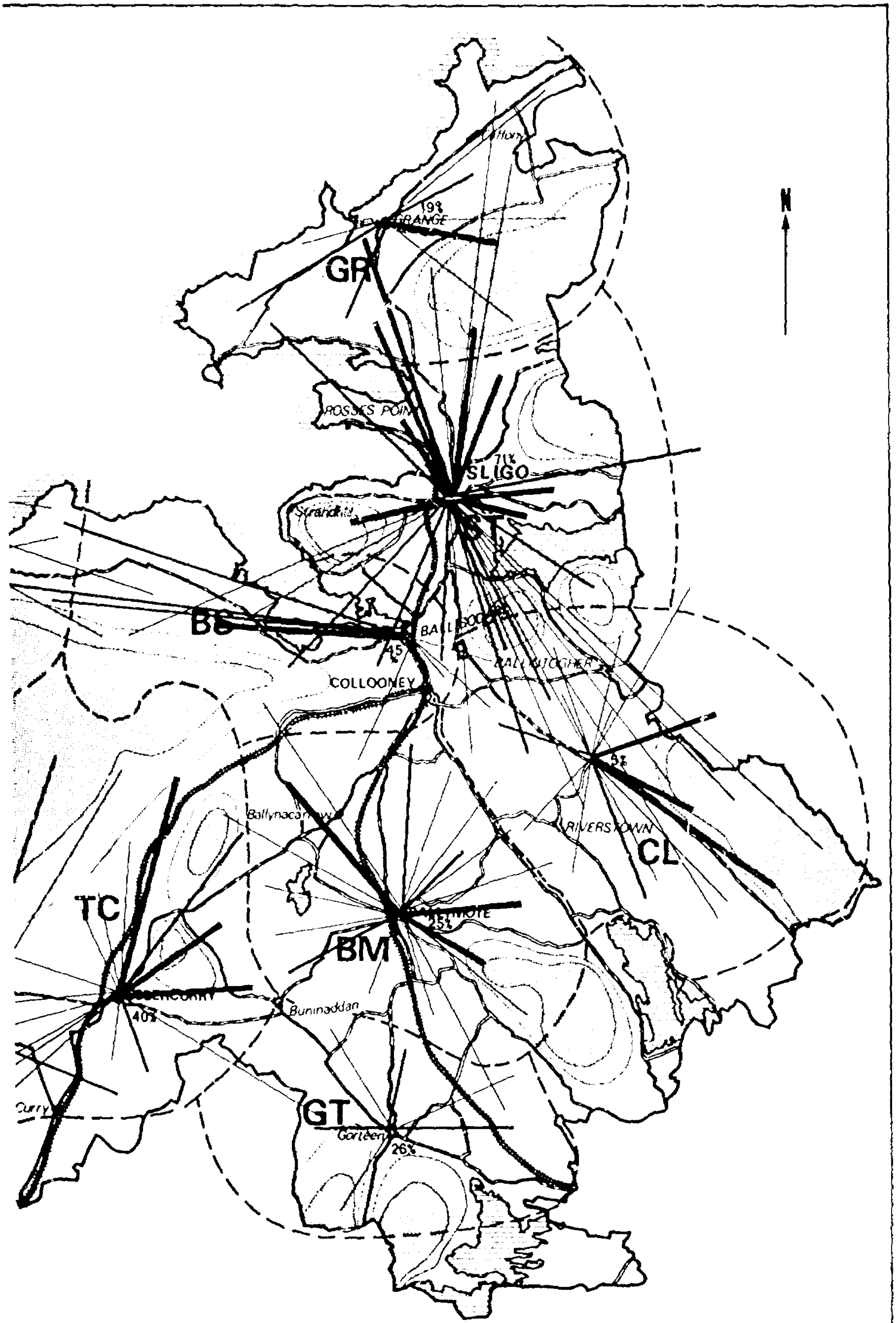
0–10

11–20

over 20

NOTE The thickness of the lines is equivalent to the numbers travelling.





N
19%
GRANGE
GR
ROSSES POINT
71%
SLIGO
ST
Strandhill
BG
BALLISODARE
45
BALLINTOGHER
COLLOONEY
8%
RIVERSTOWN
CL
Ballynacarrow
TC
BALLYMOTE
23%
BM
TOBERCURRY
40%
Buninadden
Curry
GT
Gorteen
26%

TABLE 15. Second-level school transport service by school and catchment area, 1970–71

	School	Pupils: Day	Pupils: Boarders	Pupils: Total	% day pupils [illegible]	Pupils having school transport: No. day pupils over 3 m	Own CA over 3m	Other CA (own CA inadequate)	Other CA (free from boundary)	Bus miles per day	Bus miles per pupil over 3 m
ST	Summerhill	475	209	684	73	127	61	26	40		
	Ursuline Cons	208	234	442	81	39	26	6	7		
	Mercy Cons.	389		389	67	128	56	28	44		
	Grammar Sch	95	98	193	45	52	19	33			
	Voc. School	371		371	72	105	37	47	21		
	TOTAL	1 538	541	2 079	71	451	199	140	112	218	0.48
BM	Mercy Cons	167		167	36	107	98	4	5		
	Voc. School	178		178	21	141	130	3	8		
	TOTAL	345		345	28	248	228	7	13	173	0.70
TC	Marist Cons.	152	83	235	41	90	82		8		
	Voc. School	130		130	40	78	69	5	4		
	Benada	265		265	28	191	181		10		
	TOTAL	547	83	630	34	359	332	5	22	267	0.74
EC	Convent	197		197	50	98	57	6	35	41	0.42
EK	Voc. School	194		194	4	187	167	13	7	166	0.89
BS	Mercy Cons	186		186	45	103	68	5	30	116	1.12
GR	Voc. School	115		115	19	93	93			95	1.02
CL	Voc. School	143		143	5	136	135		1	153	1.12
GT	Voc. School	118		118	26	87	87			143	1.64
	GRAND TOTAL	3 383	624	4 007	48	1 762	1 366	176	220	1 372	0.78

CA Catchment area
SOURCE Department of Education (Transport Section) data

TABLE 16. Summary of inter-catchment area movements during 1970–71

	From: M	From: F	To: M	To: F	Balance: M	Balance: F
ST			106	136	+106	+136
BM	7	7	10	17	+ 3	+ 10
TC	1		13	13	+ 12	+ 13
EC	19	1	12	36	− 7	+ 35
EK	21	69	21	1		68
BS	40	32	9	33	31	+ 1
GR	39	62			39	62
CL	31	33	1		30	33
GT	5	15			5	15
Other counties	9	17				

from the nearest 'adequate' second-level school are eligible for free school transport. Tables 14, 15 and 16[1] describe the origin of pupils in this context, and the extent of the school transport service by catchment area and school. The following main points are worthy of note:

1. The relatively high average percentage of boarders (15 per cent), particularly in the ST catchment area (26 per cent);
2. The wide dispersion of pupils in certain catchment areas; for instance, only 4 per cent of pupils in EK and 5 per cent in CL live *less* than three miles from their school;
3. The very developed level of the school transport service; more than half the day-pupils use the service and in certain areas almost all pupils use it.

8. Curriculum

According to the regulations, higher-stage subjects are grouped under five main headings: language; science; business studies; technical; and general (social studies).

Pupils are recommended to follow at least three subjects from the group suitable to them. Percentage breakdowns of the choice of subject-groups are given by catchment area and sex in Table 17.

The overwhelming leaning towards the 'language' and 'general (social studies)' group is evident, accounting for 78 per cent of all higher-stage enrolments (of which 69 per cent boys and 85 per cent girls) and 100 per cent in the EC, BS and GT catchment areas. By contrast, few pupils take the 'science', 'technical' and 'business studies' groups.[2] At present, of course, the 'science' group is offered only at ST and BM, and the 'technical' group is offered only in ST, TC and EK. However, Table 17 figures must be interpreted with caution since, in effect, pupils' choice is limited by the constraints imposed by the educational supply. For instance, a pupil who lives in EC, BS, GR, CL or GT must leave his catchment area if he wishes to take the 'business studies', 'science' or 'technical' groups. With the traditional attraction and prestige of the 'language' and 'social studies' groups, which are readily available, it is hardly surprising that pupils follow these courses.

1 The 'matrix' Table 14 gives details of movements between the catchment areas.
2 It must be noted that despite the Department of Education recommendations on the grouping of these subjects, many school principals are still opposed to the notion of even this level of 'specialization' and, accordingly, do not consciously actively stream higher-stage pupils.

TABLE 17 Higher-stage second level enrolment by discipline and catchment area, 1970–71

		Science		Business studies and commerce		Languages and general (social studies)		Technical		Total	
		Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
ST	M	33	8	1	3	184	82	33	7	221	100
	F	5		14		241		-		260	
BM	M	18	13	2	20	24	67			42	100
	F			21		56				77	
LC	M			-	5	33	84	16	11	89	100
	F			7		88		-		95	
LC	M					14	100			14	100
	F					45				45	
LK	M			-	-			16	48	16	100
	F			17	52			-	-	17	
BS	M					13	100			13	100
	F					35				35	
GR	M			9	100					9	100
	F			13						13	
CL	M			-	-					-	100
	F			10	100					10	
GT	M					13	100			13	100
	F					20				20	
Other county	M					28	100			28	100
	F					17				17	
TOTAL	M	48	12	13	3	279	69	65	16	405	100
	F	5	1	82	14	502	85	-	-	589	
GRAND TOTAL		53	5	95	10	781	78	65	7	994	100

Similar observations may be made for each catchment area in turn, except ST and to a lesser extent BM. Accordingly, *inequality of educational supply generally leads to inequality of admission to the higher-stage 'science' and 'technical' groups and, similarly, causes inequality between male and female pupils. Since all school network rationalization policies must attempt to equalize supply conditions, account must be taken of these factors.*

It is noteworthy that the authorities have felt the need for curricular reform and already the subject range has been made more comprehensive and more practical subjects have been included. In addition, educational and career guidance are gradually being introduced to aid students in the choice of subject groups.

Education and training in second-level schools generally are not very closely aligned to employment possibilities in the region. In the context of regional planning, the role of these schools is now seen as rather more pre-vocational than vocational, although the education and training received by large numbers of pupils fits and, indeed, qualifies them to enter employment as apprentices with certain basic skills.

It must be mentioned here that there is a growing sector of training in Ireland under the authority of a National Apprenticeship Board where day and block release apprenticeship training, directly geared to employment, is conducted. It is not yet highly developed in County Sligo and accordingly not treated in this study. The new Regional Technical College (RTC), established in Sligo Town in 1970 (one of nine such colleges throughout the country), is intended to play a very significant role in regional development both by co-operating in apprenticeship training and by initiating courses at the second and third level designed to provide the skilled manpower required for the economic and social development of the region.

9. Teaching staff

The relevant teaching staff ratios are given in Table 18. Out of the total of 269 teachers (including forty-two religious), 79 per cent are full-time and accordingly fully qualified. Expressed as a full-time equivalent, there are 230 teachers and the average pupil/teacher ratio is 17.4:1 for the county. This ratio is, in general, lower in the smaller than in the larger schools. The range of ratio is extremely wide for such a small sample of schools varying from 11.8:1 at GT to 26.6:1 at BS. The pupil/teacher ratio is lower in public (14.6) than in private (18.9) schools but the standards adopted for Ireland also vary for both, being 17.5:1 and 25:1 respectively.[1] However, vocational (public) schools have lower pupil-teacher ratios than general education (private) schools, since practical subjects require relatively more teachers.

Table 18 also gives information on teacher qualifications. In private schools teachers are mainly university graduates who have followed a three-year primary degree course followed by a one-year part-time university course in pedagogy. Most of them are graduates in Arts. In public schools, on the other hand, 50 per cent of the teachers are

1. According to more recent (1971) official standards for a school of 400 pupils (twenty-six teachers (full-time equivalent)), a pupil-teacher ratio of 15.2:1, and for a school of 800 pupils, forty-two teachers (full-time equivalent), a pupil-teacher ratio of 19:1.

TABLE 18. Second-level teaching staff ratios, 1970-71

CA	School	Enrolment	Classes: Number	Classes: Av. size	Teachers: Full-time: Lay	Teachers: Full-time: Relig	Teachers: Part-time: Lay	Teachers: Part-time: Relig	Teachers: Total	Full-time equiv.	Pupil/teacher ratio	Full-time qualified teachers: No. grad.	No. trng course	Comm. grad.	Arts grad.	Teach trng course
ST	Summerhill	684	19	36	19	15	3	3	55	34.9	20.1	4	4	21	28	1
	Ursuline Conv.	442	15	29.4	10	11	3	3	26	22.0	18.3	2	1	3	15	1
	Mercy Conv.	389	17	22.8	12	3	1	1	22	21.0	18.6	1	1	4	15	1
	Gramm. School	195	10	19.2	14				14	13.0	14.8	3		1	9	1
	Voc. School	371	19	19.5	21		14	4	39	19.0	19.5	4		6	6	2
BM	Mercy Conv.	167	6	27.8	7	1		3	11	9.0	18.6	2		2	7	
	Voc. School	178	11	16.2	13			1	14	12.2	14.5	1		1	4	1
TC	Marist Conv.	238	10	23.8	6	6		4	17	15.0	15.7	2		1	1	1
	Voc. School	130	10	13.0	10				10	9.5	13.7	1			3	1
	Benada	265	9	29.4	7	2		1	15	12.0	22.1	1		3	2	
EC	Convent	197	10	19.7	9	2		3	13	12.5	15.7	2		1	2	1
EK	Voc. School	194	12	16.2	12	1			13	13.6	14.3	2	1	2	3	1
BS	Mercy Conv.	186	8	23.3	4	2	1	1	8	7.0	26.6	1			4	2
GR	Voc. School	115	7	16.4	8		1	1	10	7.7	14.9	1		2		1
CL	Voc. School	143	9	15.9	10		1	1	12	10.6	13.5	1		2	1	1
GT	Voc. School	118	8	14.8	8			2	10	10.0	11.8	1		1	4	2
	Total	4 007			171	42	34	26	273	230.1	17.4	28	12	82	107	41

university graduates, while the remainder have followed teacher-training courses qualifying them to teach practical subjects.[1]

10. Buildings and equipment

Table 11 in Appendix I gives a tabular list of all schools by name and catchment area, and also gives detailed profiles of the physical facilities available at each school, showing: grounds; teaching space by general, special and other classrooms; rented accommodation; modern audio-visual teaching equipment; administrative, recreational and parking facilities. These profiles are of fundamental importance in reaching decisions on rationalization proposals.

An extract from them summarizing data on area, classroom accommodation and time utilization rates[2] by school in 1970-71 is given in Figure 3.

With the exception of three schools (Ballymote Vocational School, Enniscrone and Ballisodare Convents), the

1. The recently established Higher Education Authority, having recognized short-comings in the present system of teacher training, has recommended the setting-up of a special body responsible for planning and co-ordinating all teacher training.
2. Hours of use as a percentage of hours available.

CA	SCHOOL	AREA IN ACRES	SPECIAL ROOMS: LABORATORY 1 2 3 4	SPECIAL ROOMS: WORKSHOP 1 2 3 4 5 6
ST	Summerhill	5	■ ■ ■	■ ■
	Ursuline	25	■ ■	■
	Mercy	4	■	■
	Gramm. Sch.	10	■	
	Voc. Sch.	10	■ ■ ■ ■	■ ■ ■ ■ ■ ■
BM	Mercy	30	■	
	Voc. Sch.	1	■	■ ■
TC	Marist	40	■	
	Voc. Sch.	12.5	■	■ ■
	Benada	10	■	
EC	Convent	2	■	■ ■
EK	Voc. Sch.	13	■	■ ■
BS	Mercy	0.5	■	■
GR	Voc. Sch.	8	■	■ ■
CL	Voc. Sch.	5.5	■	■ ■
GT	Voc. Sch.	5.5	■	■
Total no. of rooms			22	24

FIGURE 3. *Special and general classroom accommodation and time*

NOTE. *Gymnasiums, multi-purpose rooms and libraries are not included. All schools have a*

area of adjacent land available is quite satisfactory and it is possible to expand. However, serious shortcomings in accommodation were revealed, as follows:

(a) of almost 150 classrooms, thirty-two are rented or of a temporary 'pre-fab' nature;
(b) over half the twenty-two science laboratories, twenty-four workshops and sixteen home economics rooms are in poor condition;
(c) the rapid expansion of enrolments has led to the use of several general-purpose rooms as classrooms;
(d) in all, there are only three language laboratories, three modern gymnasia and three school libraries.

Under these conditions, heavy time utilization rates for classrooms in certain catchment areas are inevitable. As Figure 3 shows, such rates reach 100 per cent in eight schools, i.e., classrooms are occupied continuously by classes throughout the regulation thirty-hour week. In other schools the situation is not much better, except in two schools (Ursuline and Mercy Convents) in the ST area.

However, the time utilization rates for the classrooms do not indicate the space utilization rates since, for instance, a thirty-place classroom may be occupied by a group of twenty pupils. Therefore, the space utilization rates by type of classroom and school are given in Table 19.

Overcrowding of classrooms is shown in certain schools and under-occupation of available space in others. It also emerges that, in the same school, the level of occupation can vary considerably between different types of classroom; this is caused by the nature of the curriculum and the type of classrooms available.[1]

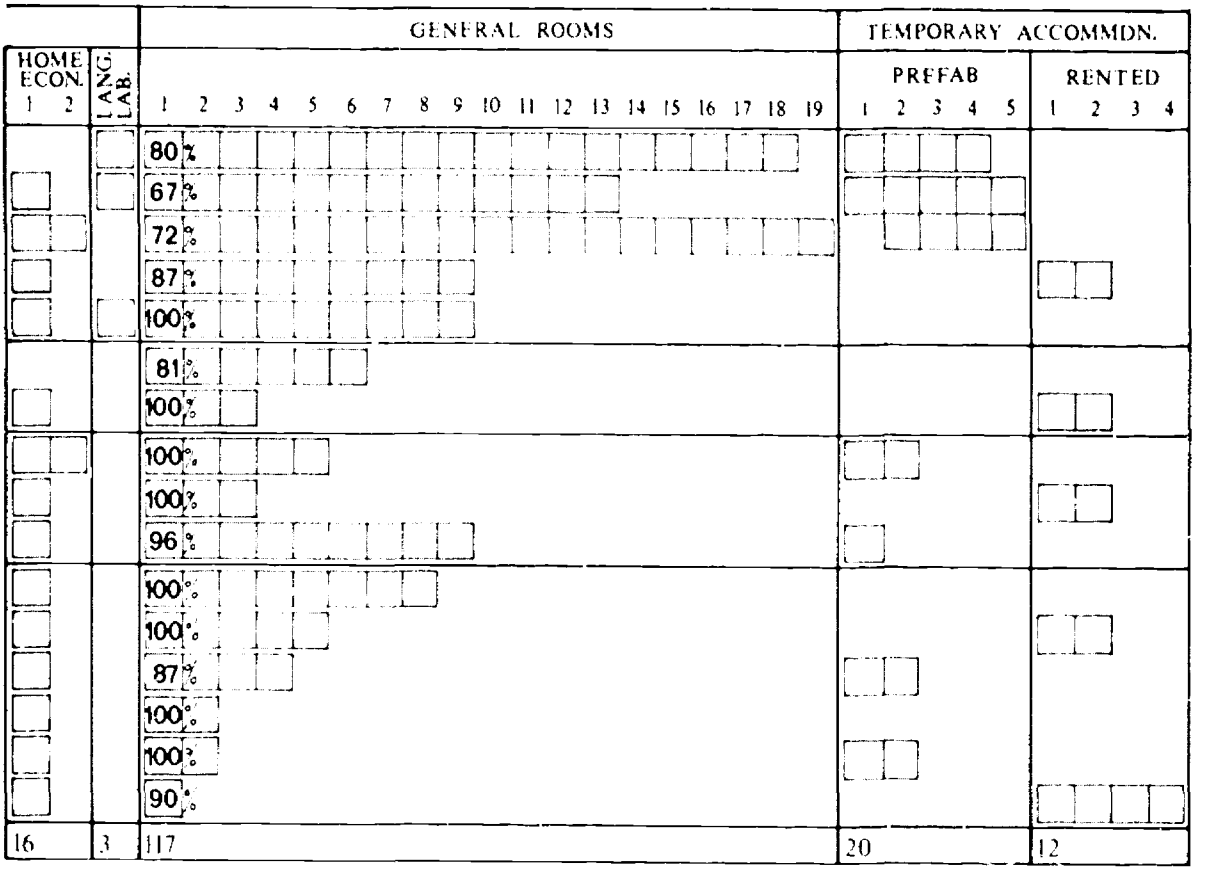
Educational equipment and playgrounds are generally quite satisfactory, but administrative facilities are inadequate.

In summary, the accommodation problem is serious. With the exception of some Sligo Town schools, the buildings picture is one of accommodation shortage and obsolescence. Yet, although new buildings, extensions and renovations have been started in some instances and plans are well advanced in others, there is still no coherent overall integrated development programme.

11. Costs and financing

Recurrent costs analysis was necessarily confined to public schools (all of which are day schools) since accounts for private schools were not available.

1 Public school premises are used in the evening for community activities and for adult education. This, however, is not usually the case for private schools.



utilization rates, 1971

thirty hour week

TABLE 19. Space utilization rates (percentage) for special and general classrooms, 1970-71

		Percentage pupil place use of classrooms				
		Science	Workshop	Language laboratory	Home economics	General
ST	Summerhill	90	90	90	..	90
	Ursuline Convent	100	33	100	77	60
	Mercy Convent	74	80	..	37	89
	Grammar School	105	..	..	49	105
	Vocational School	44	60	30	71	54
BM	Mercy Convent	76	..	..	66	82
	Vocational School	65	98	..	35	140
LC	Marist Convent	120	..	..	64	143
	Vocational School	68	83	..	19	41
	Benada	68	..	..	74	95
FC	Convent	38	47	..	69	84
EK	Vocational School	83	91	..	52	123
BS	Mercy Convent	99	26	..	52	71
GR	Vocational School	40	39	..	35	161
CI	Vocational School	61	68	..	32	102
GI	Vocational School	33	59	..	37	85

TABLE 20. Total, percentage and unit costs for second-level public schools for 1967-68 and 1970-71 (in £ Sterling, current prices)

		Instruction		Maint. and other		Administration		Transport		
		£		£		£		£		Total
Total costs										
Sligo Town	1967-68	22 226	68.0	6 493	19.7	4 067	12.3	..	..	32 786
Voc. School	1970-71	52 089	48.7	38 613	36.3	13 427	12.6	2 835	2.6	106 974
Sligo Co.	1967-68	54 809	69.0	19 095	24.0	5 502	7.6	..	..	79 406
Voc. Schools	1970-71	108 256	61.9	36 029	20.6	11 044	6.3	19 494	11.2	174 823
Unit costs pupil										
Sligo Town	1967-68	64		19		12		..		95
Voc. School	1970-71	140		104		36		8		288
Sligo Co.	1967-68	58		20		6				84
Voc. Schools	1970-71	123		41		13		22		199

NOTES: (a) Enrolment Sligo Town Vocational Schools 1967-68, 350; 1970-71, 371
Sligo Co. Vocational Schools 1967-68, 941; 1970-71, 878
(b) Average school transport cost per pupil carried: State £27.06; County Sligo £26.58; say £27 (figure used)

TABLE 21. Total, percentage and unit of public and private financing for second-level public schools for 1967-68 and 1970-71 (in £ Sterling, current prices)

		Public				Private				
		Dept. of Ed.		Local auth.		Fees		Other		
		£		£		£		£		Total
Total financing										
Sligo Town	1967-68	26 779	82	4 444	13	1 318	4	405	1.0	32 946
Voc. School	1970-71	192 562	98	2 277	1	638	0.5	547	0.5	196 024
Co. Sligo	1967-68	56 370	72	20 595	27	495	0.5	521	0.5	77 981
Voc. Schools	1970-71	127 568	83	20 955	14	1 190	1.0	3 192	2.0	152 905
Unit of financing per pupil										
Sligo Town	1967-68	76		13		4		1		94
Voc. School	1970-71	519		6		2		1		528
Co. Sligo	1967-68	60		22		0.5		0.5		83
Voc. Schools	1970-71	145		24		1		4		174

Total, percentage and per-pupil unit costs by purpose for the public schools in 1967/68 and 1970/71 are given in Table 20 for the Sligo Town schools, which are relatively large, and the county schools, which are rural and smaller.

Unit costs are somewhat inflated since they contain elements for adult education and apprentice training which, strictly speaking, should not be apportioned to formal full-time enrolment; also the unit cost for Sligo Town in 1970/71 is much inflated because a common account was used for this school and the new RTC opened in that session.

However, it is obvious from the figures that unit costs are higher in urban than in rural schools, because of the higher administrative and teacher costs, and that these unit costs have increased rapidly over the period. On cost grounds, the necessity for having two separate administrative offices in Sligo Town must be questioned, one catering for the town school and the other for the county schools. The fact that the cost of instruction has tended to decrease relative to over-all cost (and indeed that it is less than 70 per cent), may seem surprising, but firstly the special circumstances concerning the establishment of the RTC in 1970/71 and the introduction of the school transport scheme explain the relative decrease and, secondly, the nature of vocational schools requiring more practical equipment and maintenance explains the relatively high proportion of non-instructional cost. There is scope for halting the increase of unit costs in the county schools by raising the pupil/teacher ratio from the low 1971 average level of 14.0:1.

Table 21 gives the total, percentage and unit figures of *public and private financing* for second-level public schools for 1967/68 and 1970/71. Once again financing figures for Sligo Town are inflated because of the special new RTC circumstances.

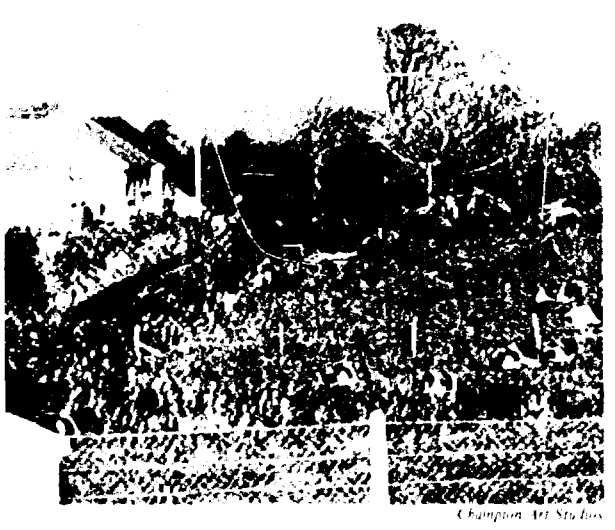
The figures reflect the facts that second-level education is practically free to pupils, that financing is accordingly almost fully public, that the state is accepting increasing responsibility for financing and that local authority financing per pupil is much higher for the county than for Sligo Town.

Private schools are free to day pupils and receive no local authority financing. The Department of Education finances salaries and transport, gives *per capita* grants and awards other grants for textbooks, equipment and in lieu of fees.

Unfortunately, precise data on boarding-school costs were not available and it was not possible, therefore, to compare the costs of providing transport and canteens with that of boarding. Fees for the boarding schools vary from £115 to £250 per annum, but the real cost per pupil is probably higher; there is also a divergence in the standard of service offered to pupils.

Champion Art Studios

The landscape of County Sligo



Champion Art Studios

"Land is of mixed quality and the average size of farms is too small to give a return sufficiently attractive to maintain the high percentage of population . . . still engaged in agriculture"

Champion Art Studios

"A tendency for small farmers to become industrial workers, while retaining their farms, may continue to the mutual benefit of agriculture and industry. . ."

PART TWO

IV. The projection of enrolments for first- and second-level education, 1975/76

It is unlikely that the medium-term trend in economic and social development will have any very significant influence on the nature and scope of medium-term (to 1976) enrolment projections for the county. Nevertheless, since school location must be decided within the long-term perspective for economic and social development, which is correlated with future demographic trends, it is desirable to outline the economic background against which enrolment will develop. This is the purpose of section 1 below.

In effect, medium-term enrolment patterns will depend very closely on population factors, especially the recent trend in birth rates and population movements. Therefore, it is also proposed to examine the demographic trends, before proceeding in a third section to estimate first- and second-level enrolment.

1. Economic and social development

The development of the north-west region of Ireland, of which the County Sligo sub-region is the centre, is the major regional development problem of the country. There is over-dependence on agriculture and there are imposing obstacles to rapid industrialization. This imbalance has resulted in migration and emigration, the extent of which will be examined in the second section.

Among the main obstacles to industrialization are lack of mineral resources, remoteness from raw material sources and markets, high cost of transport, lack of skilled personnel, and the underdeveloped state of the industrial and technical infrastructure. Before examination of the economic background, however, a note on the organization of regional development is appropriate, since education must play an important role here.

A. REGIONAL DEVELOPMENT

The organization of regional planning has evolved rapidly in recent times. Formerly responsibility for development in the county rested almost totally with elected county councillors under the administrative direction of a County Manager; emphasis was largely on local and infrastructural matters, though state intervention had been increasing.

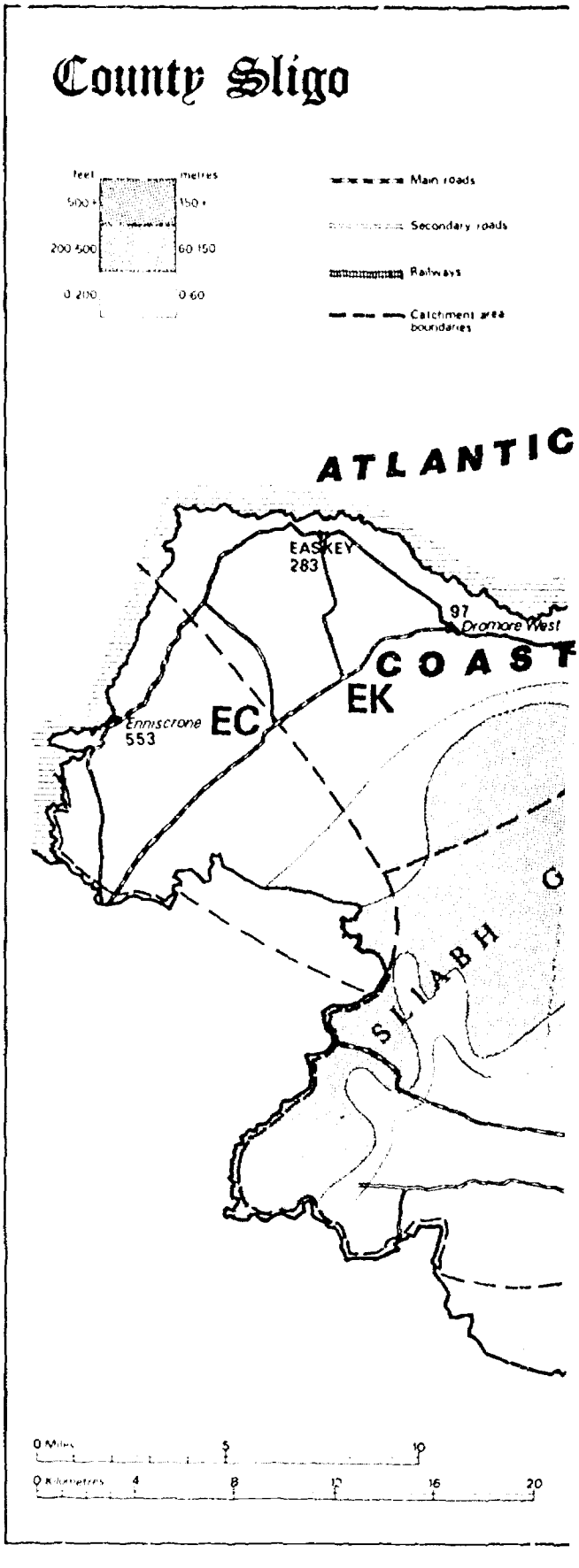
With the Planning Act, 1963,[1] requiring the preparation of five-year plans by local authorities, emphasis has shifted to more integrated physical planning. Integration and national co-ordination became more effective after 1967 with the setting up of County Development Teams consisting of the County Manager, County Engineer, County Education Officer, and County Agricultural Officer, with a specialist in development acting as full-time secretary.

It was realized that rapid industrialization must play a more dynamic role and that the county administrative area is out-dated for regional development. Accordingly, when some of the functions of the Industrial Development Authority (IDA)[2] were decentralized in 1971, Sligo Town became the headquarters for the Sligo-Leitrim region under the direction of a specialist in industrial development. The initial tasks were the preparation of a five-year economic and social development plan for the region and co-ordination with the efforts of other bodies working towards development.

Apart from formal and informal co-ordination and co-operation with the County Development Team and the regional IDA in the furtherance of economic and social development, the county education authorities support this objective by emphasizing agricultural science, home economics and other vocational subjects in public schools.[3] They also co-operate with the National Apprenticeship Board (ANCO) and other bodies in apprenticeship training, and they particularly encourage adult education where attempts are made to provide evening courses specifically vocational in nature. The role to be played by the newly established RTC in Sligo Town has already been mentioned. The county education authorities also co-operate with University College, Galway (the University of the West), in conducting extra-mural leadership training courses designed to stimulate economic and social development.

1. *Local government: planning and development Act 1963*, op. cit.
2. A national body specifically established to promote industry.
3. Although criticism has earlier been levelled at over-emphasis on the language and social studies subjects, generally at the higher stage.

Map 5. Relief map of County Sligo showing zones, towns and communications



NOTE The numbers indicate the population in the towns and villages in 1966.

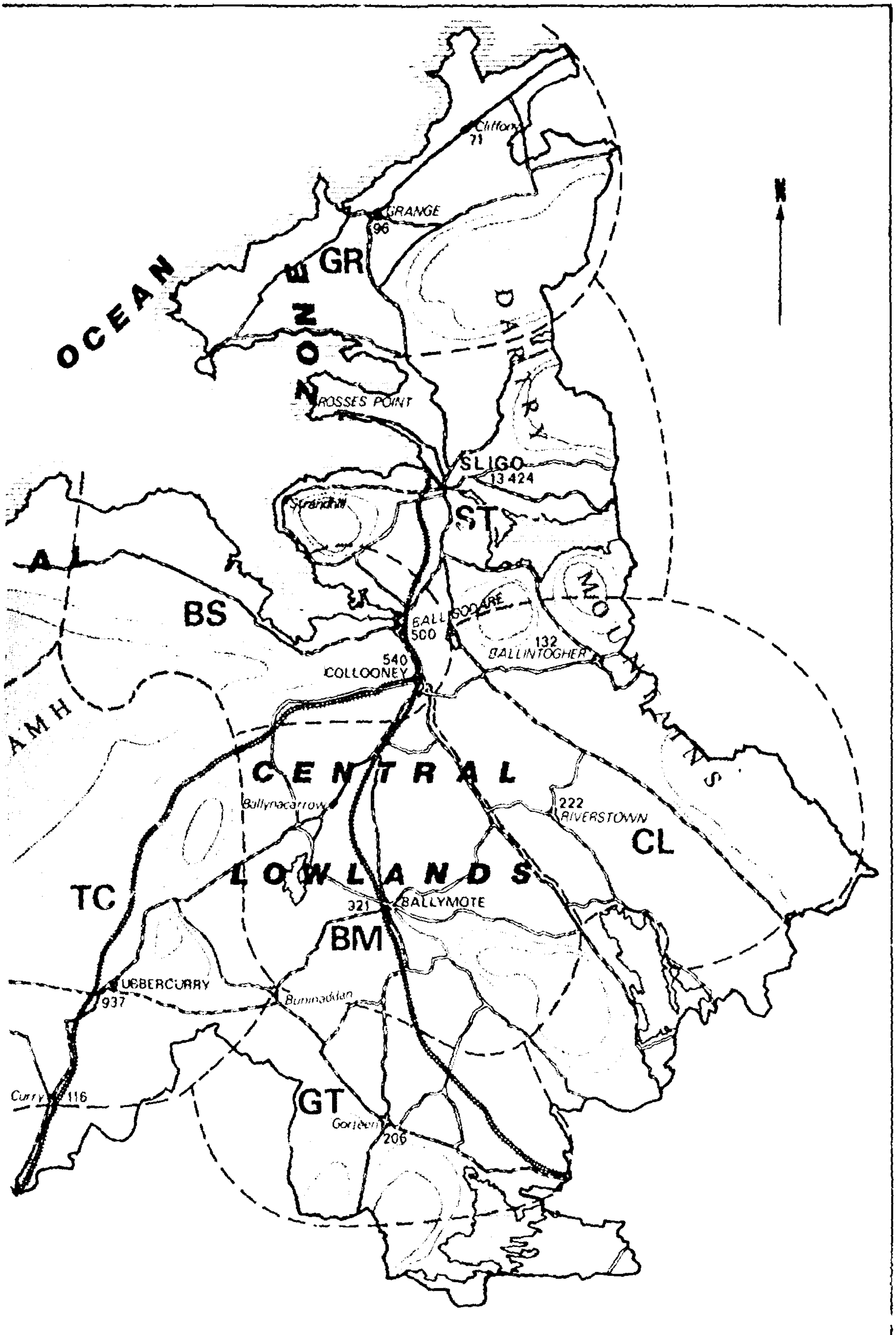

OCEAN
ZONE
GR
Cliffony
71
GRANGE
96
DARTRY
ROSSES POINT
SLIGO
13 424
Strandhill
ST
MOUNTAINS
BS
BALLISODARE
500
132
BALLINTOGHER
540
COLLOONEY
CENTRAL
LOWLANDS
Ballynacarrow
222
RIVERSTOWN
CL
TC
321
BALLYMOTE
BM
TUBBERCURRY
937
Bunninadden
Curry
116
GT
Gorteen
206

TABLE 22. Breakdown of farms by area

Acres									
1	1-5	5-10	10-15	15-30	30-50	50-100	100-200	200 +	Total
875	487	719	1 181	4 003	2 408	1 289	287	87	11 336

SOURCE: County Sligo Committee of Agriculture. *Report for 1962*. Sligo, 1964.

B. TOPOGRAPHY

Sligo is a county with 110 miles (185 kilometres) of Atlantic coast-line, two main mountain ranges and many rivers and lakes. Out of a total area of 453,956 acres, 365,000 consist of arable land, 10,150 of water surface and 78,720 are more than 700 feet (215 metres) above sea level.

From Map 5, showing relief, towns, villages and main transport routes, the county is seen to divide geographically into four zones: (a) the coastal zone; (b) the Dartry mountain range; (c) the Sliabh Gamh range; (d) the central lowlands.

C. AGRICULTURE

The land is of average quality, and is generally suited to non-intensive cultivation.[1] A minimum of fifty acres is considered by agricultural experts to constitute an economically viable farm in the present economic conditions of the region. In this respect, Table 22 indicates the extreme fragmentation of land. Out of 11,336 farms, less than 15 per cent have an area larger than fifty acres and over 60 per cent have less than thirty acres. Thus, a total of 8,954 farms, or 79 per cent of the total, are not considered as economically viable. Furthermore, the small farms are often concentrated on the poorer land and it is not surprising therefore that many serious social problems arise.[2] Income per male working in agriculture is on the average less than half of that in the Dublin region.[3]

Under these conditions, a drift from agriculture is inevitable, particularly since most young people demand a far higher standard of living than farming can offer, and allied activities such as fishing or forestry[4] do not offer any major alternatives.

Map 6 shows the geographic location of the main agricultural, industrial and service activities in 1971 and the population density in the county by district electoral division.

D. INDUSTRIALIZATION

Faced with this grim economic picture, the government has tried to stimulate industrial development. Thus, in 1952 the 'Underdeveloped Areas Act' enabled increased grants and remission of taxation to be offered to industrialists, and in 1967 the 'Small Industries Programme' made it possible to subsidize the establishment and modernization of small industries. Along the same lines, a United Nations report on regional development problems recommended a discriminatory investment policy favouring this region and suggested that Sligo Town be designated as a 'pole of growth' for the whole region.[5]

Obviously more rapid industrialization involving heavy capital investment is necessary and more skilled personnel must be trained.

Apart from the shortcomings mentioned, however, modest progress in industrialization is being made and the

1 Coastal zone: carboniferous limestone, sandstone and shale covered with glacial drift, some marshes, good pasture land
Dartry and Sliabh Gamh (foothills): drift-covered carboniferous limestone, good pasture
Central lowlands (over half the region): carboniferous limestone, marshes and good pasture land

2 The average age of male farmers is 56 years and one-sixth are over 70; half of the women engaged in agriculture are over 65 and only four per cent under 45

3 C. Buchanan, *Regional studies in Ireland*. Dublin, An Foras Forbartha, 1968, p. 9 (The Buchanan report)

4 State forestry: 12,632 acres with reserve 1,450; 9,917 acres are productive. The landed value of fish at Sligo harbour in 1969 was £47,000, i.e. 1.6 per cent of all fish landed in Irish ports; employment estimate for 1976 is forty-three full time fishermen and 218 part-time fishermen

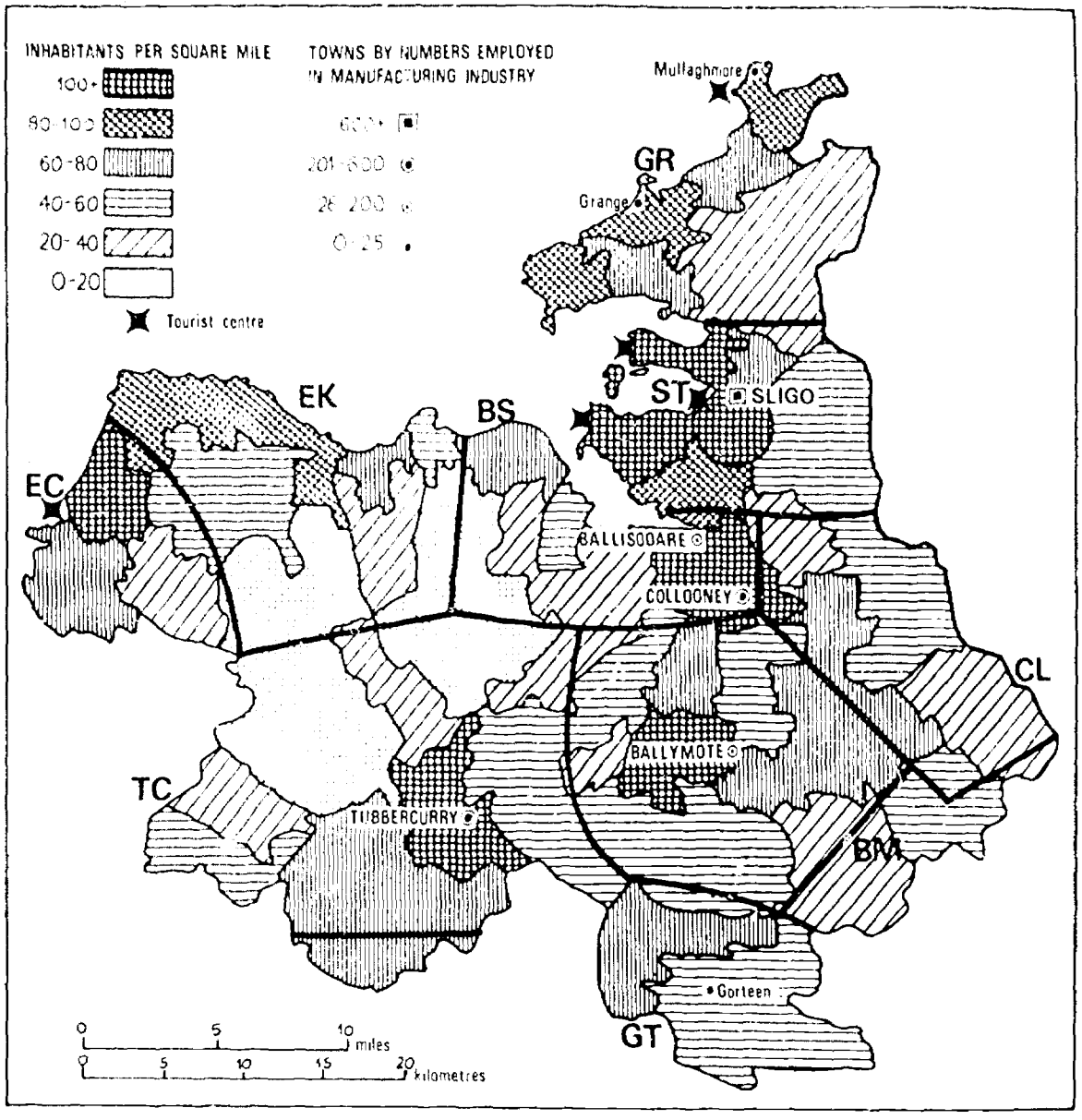
5 The Buchanan report, op. cit.

TABLE 23. Employment structure for County Sligo and Ireland, 1961/71 and estimates for 1976

		Agriculture		Industry		Services		
		Number	Percentage	Number	Percentage	Number	Percentage	Total
1961	State	378 732	36.0	258 835	24.6	414 972	39.4	1 052 539
	County Sligo	11 280	55.6	2 990	14.7	6 013	29.7	20 283
1966	State	333 527	31.3	293 733	27.9	438 727	41.1	1 065 987
	County Sligo	9 964	52.4	2 977	15.7	6 074	31.9	19 015
1971	State	282 000	26.3	328 000	30.6	461 000	43.1	1 071 000
	County Sligo	8 400	45.9	3 700	20.2	6 200	29.8	18 300
1976	State	233 000	20.8	385 000	34.5	498 000	44.7	1 116 000
	County Sligo	7 355	43.2	4 652	27.3	5 028	29.5	17 035

NOTE: Employment in agriculture in County Sligo for 1971–76 is projected to decrease at the national rate of 3 per cent a year.
Employment in industry for 1971–76 would increase by 30.5 per cent.
Employment in services would decrease by 3.2 per cent.
Full-time unemployment in May 1971 was 1,925 (1,364 males and 561 females) of which some 60 per cent were unemployable. One hundred men and thirty girls travel daily into County Sligo to work.

SOURCE: *Census of the population of Ireland, 1961*. Vol. IV. Dublin, Stationery Office, 1962; *1966*. Vol. III. Dublin, Stationery Office, 1967.



MAP 6. *Population density and the degree of industrialization*

county does have some other advantages. Sligo Town is an important retail distribution and services centre. Tourism, with development potential throughout Ireland, is becoming a major source of income for the county.[1] An idea of the level of development of the county is given by an examination of the employment trend by sector in Table 23, while Table 23a compares the number of employees in industry with the percentage of people in agriculture.

1. In 1971 thirty-two hotels with 848 rooms, plus an additional 264 rooms in the tourist season, seventeen farmhouses are officially recognized by *Bord Fáilte* the National Tourist Board. Hotel service staff levels are higher on the average than in the rest of the country.

TABLE 23a. Employment in industry (employees) and agriculture (percentage) by catchment area

CA	Employees in industry M	Employees in industry F	Percentage in agriculture
ST	679	443	9.3
BM	75	25	59.9
TC	411	120	66.4
EC	...	...	59.1
EK	...	...	74.4
BS	480	38	40.1
GR	10	1	58.5
CL	...	...	69.6
GT	3	...	70.2

E. EMPLOYMENT STRUCTURE

Table 23 gives the employment structure evolution from 1961 to 1971 and the projected structure in 1976. Two trends may be observed: a gradual decrease of employment in agriculture and a sharp rise of that in industry. The percentage employed in services has levelled out at about 30 per cent during the last decade; the slight drop in employment projected for this sector is due to an expected increase in productivity.

The 1976 projections were derived from a regional survey for 1971–76, which extrapolated recent national trends and adjusted them for economic development prospects. They are based on proposals for capital investment of £2.6 million, of which £1.2 million would go towards factory construction and £1.4 million on industrial grants.[1] This investment would create some 780 new jobs during this period, as indicated in Table 24.

TABLE 24. Programme of manufacturing job creation for County Sligo, 1971–76

	1971–72	1972–73	1973–74	1974–75	1975–76	Total
ST	–	50	50	100	150	350
BM	–	–	–	50	50	100
TC	20	50	50	50	50	220
EK	–	20	–	–	20	40
BS	–	–	–	50	20	70

Nearly 50 per cent of this investment is allocated to ST and the remainder is shared between BM, TC, EK and BS. These data will be taken into account when projecting enrolment demand in these catchment areas.

2. Demographic trends

The population has fallen steadily from 188,886 in 1841 to 50,236 in 1971. The main features of this decline are rural depopulation, migration and emigration. Trends by catchment area from 1951 to 1966 are shown in Table 25.

The causes of this decline are seen to be historical, geographical and economic. In the course of history there was pressure for heavy unnatural westward movement of people of older cultures, causing congested habitation in poor non-viable farm areas. No industrial revolution was experienced in this the most western outpost of Europe. In more recent times technical progress, industrialization, increasing productivity and urbanization trends throughout the country have caused a movement away from the county.

Comparative rates of population change by census year from 1926 to 1971 for Ireland, County Sligo and Sligo Town are shown in Appendix 1, Table 1. The rate of population decrease for County Sligo has slowed down during the last decade; there was a 2 per cent decrease for 1966–71 as against 4.3 per cent for 1961–66. This slowing down is caused mainly by a decrease in migration from the county.

A. URBAN NETWORK

Sligo Town plays a dominant role in the county, having nearly one-quarter of the total population of the county and with almost 58 per cent, i.e. 28,000 people living in the town and a fifteen-mile radius of it. Two other towns, Tubbercurry and Ballymote, with populations of about 1,000, and fourteen small villages with less than 500 inhabitants form the urban network of the county; the level of urbanization by catchment area is shown in Table 25. It is important to note that the population in most of the small villages has been declining.

B. TRENDS BY CATCHMENT AREA

Table 25 shows that from 1951 to 1966[2] all catchment areas decreased in population, with the exception of ST, which has remained relatively stable and even increased slightly between 1961 and 1966. Of the eight other catchment areas, four decreased in population by over 20 per cent, three by over 14 per cent and BS by 8 per cent.

1 *Regional industrial plans, 1973–77*, op. cit.

2 These figures are estimated on the basis of demographic statistics for district electoral divisions adjusted for each catchment area

TABLE 25. County Sligo population trends by catchment area, 1951, 1961 and 1966

	Population 1951	Population 1961	1951–61 change % p.a.	Population 1966	Area in acres	Population per 100 acres	1961–66 change % p.a.	Percentage urban 1966	Percentage farming 1966
ST	17 745	17 198	0.31	17 441	34 565	50.5	+ 0.28	80.9	9.3
BM	7 326	6 286	1.42	5 762	60 413	9.6	1.67	16.0	59.9
TC	10 278	8 541	1.69	7 720	111 448	6.9	1.92	15.0	66.4
TC	2 702	2 433	1.00	2 379	22 103	10.8	0.44	26.2	59.1
EK	5 211	4 657	1.06	4 387	62 683	7.0	1.16	8.7	74.4
BS	3 301	3 144	0.48	3 037	27 605	11.0	0.68	38.1	40.1
GR	4 385	3 878	1.16	3 599	41 656	8.6	1.44	8.4	58.5
CL	5 569	4 690	1.58	4 497	57 409	7.8	0.82	7.9	69.6
GT	3 455	2 734	2.09	2 441	25 924	9.4	2.14	8.4	70.2
County Sligo	59 972	53 561	1.07	51 263	443 806	11.6	0.86	37.7	52.4
State	2 960 593	2 818 341	0.48	2 884 002	17 024 000	16.9	+ 0.46	48.0	31.8

1 State 26,600 sq. miles 108.4 inhabitants per sq. mile (compare with 60.8 for the province of Connacht)

2 The farming community refers to farmers, relatives living with them and farm managers

NOTE Populations by catchment area were aggregated from District Electoral Division (DED) populations. Where catchment area boundaries run through the DEDs, the latter were assigned to the catchment area having the largest portion. The DED of Ahanagh was assigned to BM to return total county figures. This does not materially alter the picture of distribution or of the trend of the catchment area change.

SOURCE *Census of the population of Ireland 1961*, Vol. I, op. cit., *1966*, Vol. I, op. cit.

It is noteworthy that the average annual population percentage decrease was much less from 1961 to 1966 (annual average 0.86) than from 1951 to 1961 (annual average 1.07); the rate of decrease 1966–71 has also been slower than that for 1961–66.

C. POPULATION STRUCTURE

An outline of population structure is given in Table 26.

TABLE 26. Population structure for 1961 and 1966

	Age-group (percentage)					
Year	0–4	5–14	15–19	20–44	45+	Total
1961	9.4	20.0	7.5	19.5	43.6	100
1966	9.4	19.8	8.8	18.4	43.6	100

Of particular significance for educational planning purposes is the increasing percentage of the 0–19 age-group. This is caused mainly by reduced emigration amongst the 15–19 age-group, especially for girls; the female/male ratio for the 15–19 group increased from 94 to 96 per cent between 1961 and 1966.

A dichotomy in structure is evident between Sligo Town and the rest of the county; for example, in both 1961 and 1966 the 0–4 age-group accounted for 11 per cent of the population in the former, as against 8.8 per cent in the latter. During this period, the 5–14 age-group, in relative terms, increased to make up over 20 per cent of the population in Sligo Town and decreased to below this percentage in the rest of the county. The population of this large town gets younger while that of the rural areas grows older.

The following county breakdown of the 20–44 age-group (the main marrying group) for 1966 is indicative of the underlying sociological problems:[1]

Age 20–44	*Married*	*Single*	*Widowed*
6,338 male	2,591 (40.9 per cent)	3,725 (58.8 per cent)	22
6,016 female	3,853 (64.0 per cent)	2,082 (34.4 per cent)	80

Again it is likely that the figures for the main urban areas are fairly normal and that the abnormality originates in the rural areas.[2]

D. NATURAL INCREASE AND MIGRATION

Between 1961 and 1966 the greater number of births (4,761) than deaths (3,718) gave a natural increase for the county of 1,043 (403 male and 640 female); the rate of natural increase slowed down somewhat for 1966–71 with an absolute increase of 268 males and 479 females. During the 1961–66 period there was a net migration from the county of 3,341 (1,695 male and 1,646 female) resulting in a total population decrease of 2,298 (1,292 male and 1,006 female); for 1966–71 net migration was 1,774 (707 male and 1,067 female) with a consequent county population decrease of 1,027 (439 male and 588 female). Table 27 compares some population trends with the national figures.

The county, with lower birth rates and higher death rates than the national averages for both 1961–66 and 1966–71, consequently had a lower natural increase. While the national average natural increase remained steady at about 1 per cent, that for County Sligo dropped from 0.4 to 0.29 per cent for the second quinquennium. However, because of reduced net migration from the county, the total population fall was reduced from 4.3 per cent over the first half to 2 per cent over the second half of the decade; there was a 3 per cent national population increase over this latter period.

More detailed migration analysis was found necessary. Table 28, a migration table for the county by quinquennial age-group, was prepared (using IIEP assumptions) and shows that the migration has a relatively insignificant over-all effect on first-level age groups, but has a considerable effect on the 15–19 group. Migration takes place mainly among the 15–29 age-group and undoubtedly differs between catchment areas, but is more acute for rural than for urban areas.

To estimate potential demand by catchment area more accurately, an analysis was made of net migration by the school age-groups 5–9, 10–14 and 15–19. The results are shown in Table 29. A table of migration indices by catchment area is given in Appendix I, Table 2. It can be seen that net migration varies by catchment area, sex and age-group. However, no significant correlation emerges since most of the figures in Table 29 may be considered merely as orders of magnitude deriving, as they do, from two censuses with the application of a survival rate per age-group.

Even so, disturbing migration trends for the 15–19 age-group emerge; net migration for the 5–9 and 10–14 age-groups is not very significant. Male and female migration for the 15–19 age-group is heavy in all catchment areas and heavier for girls than for boys (excepting ST and EC). This reflects a lack of attractive employment opportunities, especially for girls. The exceptions indicated at ST and

1. There are very few marriages among the 15–19 age-group in the county.
2. See Appendix I, p. 190, for population pyramids.

TABLE 27. Average annual rates per thousand population, 1961–66 and 1966–71

		Marriages	Births	Deaths	Natural increase	Estimated net migration	Population change (percentage)
County Sligo	1961–66		18.2	14.2	4.0	12.7	4.3
	1966–71	5.6	17.1	14.1	2.9	7.0	2.0
State	1961–66	5.7	21.9	11.7	10.3	5.7	+ 2.3
	1966–71	7.3[1]	21.4	11.2	10.1	4.2	+ 3.0

1. Figures for 1971 only.
SOURCE: *Census of the population of Ireland, 1966*, Vol. 1, *op. cit.* and *Preliminary report, 1971*, *op. cit.*

TABLE 28. County Sligo migration trend, 1961–66

1961	Population 1961 M	F	1966	Population 1966 M	F	Net gain or loss M	F	Births 1961–66 M	F	Deaths from 1961 (hypoth.) M	F	Net migration 1961–66 M	F
			0–4	2 486	2 321	+ 2 486	+ 2 321	2 440	2 321	67	50	+ 112	+ 4
0–4	2 605	2 438	5–9	2 574	2 444	31	+ 6			28	21	3	+ 27
5–9	2 667	2 585	10–14	2 590	2 560	77	25			6	5	71	20
10–14	2 787	2 696	15–19	2 295	2 200	493	496			8	5	485	491
15–19	2 069	1 938	20–24	1 254	1 123	+ 815	815			9	5	806	810
20–24	1 234	1 102	25–29	1 038	1 041	196	61			8	4	188	57
25–29	1 190	1 065	30–34	1 194	1 047	+ 4	18			8	6	+ 12	12
30–34	1 387	1 313	35–39	1 300	1 345	+ 3	+ 32						
35–39	1 525	1 608	40–44	1 462	1 460	63	148			1 903	1 585	266	287
40–59	7 083	6 084	45–64	6 457	5 624	547	460						
60+	5 170	5 094	65+	3 607	3 752	1 563	1 342						
Sub-total	27 638	25 923		26 346	24 917	1 292	1 006	2 440	2 321	2 037	1 681	1 695	1 646
TOTAL	53 561			51 263		2 298		+ 4 761		3 718		3 341	

SOURCE Population and migration: *Census of the population of Ireland, 1961*, Vol. II, op. cit., p. 45; *1966*, Vol. I, op. cit., p. 4; *1966*, Vol. II, op. cit., p. 45.
Deaths: *Statistical abstract of Ireland, 1968*, Dublin, Stationery Office, 1968, p. 37.

EC may be attributed to the 'pull' of the capital town for the former and the availability of higher-stage education in the latter, which draws pupils from the neighbouring catchment area (EK), where there are no higher-stage facilities. In this context it may be mentioned that the provision of equal opportunity for higher-stage education is likely to reduce migration for the 15–19 age-group quite significantly in future.

TABLE 29. County Sligo migration effect by catchment area for school age-groups, 1961–66

	1961 age grp.	1961 pop. actual M	F	1966 age grp.	1966 survivors (hypoth.) M	F	1966 pop. actual M	F	Net estim. migration M	F
ST	0–4	915	886	5–9	905	878	927	912	+ 22	+ 34
	5–9	858	836	10–14	857	834	813	877	– 44	+ 43
	10–14	842	804	15–19	839	803	703	788	– 136	– 15
BM	0–4	172	182	5–9	169	180	156	179	– 13	– 1
	5–9	192	188	10–14	191	187	191	172	– –	– 15
	10–14	226	216	15–19	225	215	175	140	– 50	– 75
TC	0–4	483	408	5–9	477	404	448	394	– 29	– 10
	5–9	487	518	10–14	485	516	466	496	– 19	– 20
	10–14	546	527	15–19	544	526	445	407	– 99	– 119
EC	0–4	143	147	5–9	141	145	149	152	+ 8	+ 7
	5–9	183	163	10–14	182	162	184	160	+ 2	– 2
	10–14	191	169	15–19	190	168	153	138	– 37	– 30
EK	0–4	256	217	5–9	253	214	257	224	+ 4	+ 10
	5–9	276	248	10–14	275	247	279	239	+ 4	– 8
	10–14	251	294	15–19	250	293	214	222	– 36	– 71
BS	0–4	140	137	5–9	138	135	140	137	+ 2	+ 2
	5–9	144	138	10–14	143	137	134	142	– 9	+ 5
	10–14	140	135	15–19	139	134	118	106	– 21	– 28
GR	0–4	160	150	5–9	158	148	162	146	+ 4	– 2
	5–9	176	160	10–14	175	159	177	146	+ 2	– 13
	10–14	188	195	15–19	187	194	162	157	– 25	– 37
CL	0–4	196	175	5–9	193	173	198	168	+ 5	– 5
	5–9	190	175	10–14	189	174	183	165	– 6	– 9
	10–14	198	176	15–19	197	175	161	117	– 36	– 58
GT	0–4	140	136	5–9	138	134	135	132	– 3	– 2
	5–9	161	159	10–14	160	158	161	155	+ 1	– 3
	10–14	205	178	15–19	204	177	163	125	– 41	– 52
TOTAL	0–4	2 605	2 438	5–9	2 572	2 411	2 572	2 444	– –	+ 33
	5–9	2 667	2 585	10–14	2 657	2 574	2 588	2 552	– 69	– 22
	10–14	2 787	2 694	15–19	2 775	2 685	2 294	2 200	– 481	– 485

SOURCE *Census of the population of Ireland, 1961*, Vol. II, op. cit., pp. 211–213; *1966*, Vol. II, op. cit., pp. 222–223.

TABLE 30. Projected population of County Sligo school age-groups by catchment area, 1975/76

	Age group	Survivors 1975/76		Adjusted for migration effect		Adjusted for econ. & soc. devel. effect		Educational reform effect		NET	
		M	F	M	F	M	F	M	F	M	F
ST	5–9	768	745	+ 18	+ 29	+ 88	+ 87			875	861
	10–14	770	731	40	+ 38	+ 88	+ 87			818	856
	15–19	746	707	121	13	+ 88	+ 87	+ 6	+ 10	719	791
BM	5–9	144	153	11	1	+ 25	+ 25			158	177
	10–14	172	164	—	13	+ 25	+ 25			197	176
	15–19	200	189	44	66	+ 25	+ 25	+ 9	+ 13	190	161
TC	5–9	405	343	25	8	+ 55	+ 55			435	390
	10–14	436	452	17	18	+ 55	+ 55			474	489
	15–19	484	463	88	105	+ 55	+ 55	+ 18	+ 21	469	434
EC	5–9	120	123	+ 7	+ 6					127	129
	10–14	164	142	+ 2	2					166	140
	15–19	169	148	33	26					136	122
FK	5–9	215	182	+ 3	+ 9	+ 10	+ 10			228	201
	10–14	247	216	+ 4	7	+ 10	+ 10			261	219
	15–19	222	258	32	63	+ 10	+ 10	+ 6	+ 13	206	218
BS	5–9	117	115	+ 2	+ 2	+ 18	+ 17			137	134
	10–14	129	120	8	+ 4	+ 18	+ 17			139	141
	15–19	124	118	19	25	+ 18	+ 17			123	110
GR	5–9	134	126	+ 4	2					138	124
	10–14	157	139	+ 2	11					159	128
	15–19	166	171	22	33					144	138
CT	5–9	164	147	+ 3	4					167	143
	10–14	170	152	5	8					165	144
	15–19	175	154	32	51					143	103
GT	5–9	117	114	3	2					114	112
	10–14	144	138	+ 1	3					145	135
	15–19	181	156	36	46					145	110
TOTAL	5–9	2 184	2 048	2	+ 29	+ 196	+ 194			2 378	2 271
	10–14	2 389	2 254	61	20	+ 196	+ 194			2 524	2 428
	15–19	2 467	2 364	427	428	+ 196	+ 194	+ 39	+ 57	2 275	2 187

NOTE: Account was taken of the results of the migration analysis and also of the effects of the planned job creation (780) estimated as net migration of 100 people into County Sligo, each having on average of three children (with half of the total males) and the total divided equally between the age-groups 5–9, 10–14, and 15–19.

E. PROJECTION OF SCHOOL-AGE POPULATION

While it is not necessary to go beyond projecting the school-age population by catchment area for immediate planning purposes, nevertheless it is necessary to outline the framework within which the total population will evolve since decisions on school location are long-term in nature. This is also necessary as a guideline to the ordering of priorities and as a background against which to review the implementation of the school map proposals.

The over-all population appears to be reaching stability; the declining natural increase is gradually being offset by a decrease in net migration. There is likely to be a gradual increase in the relative proportion of the school-age population because of an increased retention rate among the 15–19 age-group and, with increasing urbanization, a tendency towards a younger population. The drift from agriculture must inevitably continue while employment in industry will increase. Finally, the trend in population re-distribution is likely to continue, whereby the rate of urbanization in the larger centres, such as Sligo Town and its environs and in Tubbercurry and Ballymote, increases alongside the steady depopulation of rural areas, including the further diminution of some of the smaller villages.

A population projection for 1975/76 for school-age groups by catchment area is shown in Table 30.

3. Enrolment projections

A. METHOD AND ASSUMPTIONS

Clearly, the pattern of educational demand depends upon many complex social and economic factors and results in participation (or enrolment) rates which, as has been seen, vary by age, sex, catchment area and educational level.

For long-term projections it would obviously be necessary to study to what extent participation rates are sensitive to all the major factors. However, experience has shown that participation rates have a certain inertia in the short term and large alterations cannot be expected within a five-year period.

For this reason, a standard arbitrary assumption has been made that enrolment rates will rise in both the first and second levels. Automatic promotion from grades I to VI and compulsory education to age 15 are assumed. Accordingly, enrolment rates will be 100 per cent for all

TABLE 31. Population aged 10–14 in 1971 by catchment area

	1966 actual		1971 with survival rate		1971 with migration adjustment		
	M	F	M	F	M	F	Total
ST	905	878	902	876	857	910	1 767
BM	169	180	168	179	168	177	345
TC	477	404	475	402	456	386	842
EC	141	145	140	144	140	144	284
FK	253	214	251	213	254	207	461
BS	138	135	137	135	129	140	269
GR	158	148	158	147	158	135	293
CL	193	173	192	172	186	163	349
GT	138	134	137	134	137	131	268
County Sligo	2 572	2 411	2 560	2 402	2 485	2 393	4 868

pupils in the compulsory 6–14 age-group.[1] As regards second-level admission rates, it was assumed that the present range would tend to narrow owing to the expected increase in admission rates in all areas, with the exception of ST. Finally, enrolments in second-level years 2 to 5 were projected on the basis of promotion rates observed in 1970/71, adjusted to reduce the expected differences in the supply conditions of the catchment areas.

With these assumptions it was possible to project enrolment in second-level education by catchment area on the basis of enrolments by school and grade in first-level education in 1970/71 since, for example, pupils in grade III in 1971 will become second-year pupils in second-level education in 1975/76. The difficulty of distributing the higher-stage pupils among the various subject-groups then remained.

It would have been desirable to relate this distribution to manpower requirements but, as has already been stated, this approach was impossible while data on the longer-term prospects of the labour market within the county and the region are lacking. Also, with the increased impact of the educational reform, the imbalance of choice between the various subject-groups in the higher stage may tend to diminish. Finally, even if real progress is made towards rationalization of the school network by 1975/76, it is even more likely that *the distribution of demand will be governed by the educational supply*. For all these reasons, projected enrolments for the higher stage have not been distributed between the various subject-groups.

Enrolment projections were made by applying the targets set to the estimated school-age population. The 4-year-old group was projected by catchment area from estimates of 1971 births, with an adjustment for migration. Analysis of participation for the 10–14 age-group in first-level education by catchment area in 1971 (Table 31) enabled enrolment forecasts for this level to be made.

B. ENROLMENT PROJECTIONS

Target demand for first- and second-level education is given in Tables 32 and 33, and enrolment projections by catchment area in Tables 34 and 35 respectively.

The projections for first-level education were calculated from the projected age-group statistics and the targets. The forecast shows an increase in enrolment rates for 4- and 5-year-olds, an almost steady rate for 5- to 9-year-olds and a lower rate for 10- to 14-year-olds, which is offset by a corresponding rise in the 10 to 14 second-level enrolment rates. Over-all, this amounts to a decrease in first-level enrolments in the county from 7,990 in 1970/71 to 7,472 in 1975/76. Examination of demand by catchment area shows decreases in ST, BM, BS and CL, no change in GR and increases in TC, EC, FK and GT. These divergencies will be taken into account when considering possible rationalization alternatives.

The first major point of interest to emerge from the potential second-level demand is the very significant difference between 1971 and 1976 in the proportion of higher-stage enrolments in the various catchment areas. The

TABLE 32. Participation targets (percentages) by catchment area for first-level age-groups 4–5, 5–9, 10–14 and for second-level 10–14, 1975/76

		First level			Second level
		4	5–9	10–14[2]	10–14
ST	1970/71	83.7		55	..
	1975/76	85.0	100	50	50
BM	1970/71	49.4		74	..
	1975/76	68.0	100	59	41
TC	1970/71	50.0		48	..
	1975/76	73.0	100	45	55
EC	1970/71	43.1		49	..
	1975/76	65.0	100	47	53
FK	1970/71	27.3		56	..
	1975/76	57.0	100	50	50
BS	1970/71	77.3		65	..
	1975/76	82.0	100	55	45
GR	1970/71	56.9		60	..
	1975/76	71.5	100	52	48
CL	1970/71	70.0		65	..
	1975/76	78.0	100	55	45
GT	1970/71	38.5		48	..
	1975/76	62.5	100	45	55
County Sligo	1970/71	56.7		56.6	34.4
	1975/76	75.8	100	50	50

1 Participation targets for catchment areas are set by halving the difference between the present figures for ST and that for each area.

2 Figure calculated by reference to lowest target (GT 45 per cent) and then any divergencies from this figure are halved.

1 The enrolment ratio is so close to 100 that this figure is taken.

TABLE 33. Enrolment in grades II–VI (first level) and admission and retention rate targets (second level), 1975/76

	1970/71 grades II–VI					1975/76 admission and retention targets (percentage)				
	II	III	IV	V	VI	I/VI	2/1	3/2	4/3	5/4
ST	451	415	404	387	371	1.03	0.97	0.96	0.86	0.80
BM	107	96	87	107	88	0.97	0.95	0.95	0.86	0.80
TC	111	122	136	144	157	0.95	0.95	0.95	0.86	0.80
EC	57	56	46	55	39	0.95	0.95	0.95	0.86	0.80
EK	88	81	91	93	61	0.95	0.95	0.95	0.86	0.80
BS	64	78	62	82	67	0.95	0.95	0.95	0.86	0.80
GR	55	52	65	70	48	0.75	0.95	0.95	0.86	0.80
CL	85	89	87	73	95	0.75	0.95	0.95	0.86	0.80
GT	31	35	51	47	36	0.75	0.95	0.95	0.86	0.80
County Sligo	1 049	1 024	1 029	1 058	962					

TABLE 34. Potential demand by catchment area and age-group for the first level, 1975/76

	1975/76					
	4	5–9	10–14			
			M	F	Total	Total 1970/71
ST	288	1 735	409	428	2 860	3 244
BM	51	288	111	98	548	748
TC	64	732	203	210	1 209	1 040
EC	31	256	78	66	431	381
EK	45	429	130	108	712	603
BS	49	271	76	78	474	570
GR	39	262	83	67	451	457
CL	54	263	86	73	476	661
GT	26	180	60	45	311	286
County Sligo	646	4 416	1 236	1 173	7 472	7 990
Population	852	4 649	2 524	2 424	10 449	10 449
Enrol. rate (percentage)	75.8	100	50	50	72	76

TABLE 35. Potential demand by catchment area for the second level, 1975/76[1]

	Year								
	1	2	3	4	5	Lower stage	Higher stage	Total	Total 1971
ST	465	415	388	319	245	1 268	564	1 832	2 079
BM	104	88	76	80	53	268	133	401	345
TC	105	110	116	107	93	331	200	531	650
EC	54	50	39	41	23	143	64	207	197
EK	84	76	73	69	36	238	105	343	194
BS	61	70	53	61	40	184	101	285	186
GR	41	37	44	41	22	122	63	185	115
CL	64	63	59	42	44	186	86	272	143
GT	23	25	34	27	17	82	44	126	118
County Sligo	1 001	934	885	787	573	2 822	1 360	4 182[2]	4 007

1. Based on Table 30, without taking inter-catchment area movement into account.
2. With the addition of the net movement of pupils into County Sligo (400), the total demand comes to 4,582.

potential demand for the lower stage remains almost static. The figures relate exclusively to County Sligo pupils and should therefore be increased by some 400 to take account of pupils from outside the county who are likely to be enrolled as boarders. Over-all, second-level enrolment should increase from about 4,000 pupils in 1970/71 to about 4,580 in 1975/76, an increase of 14.5 per cent.

This over-all enrolment increase differs by catchment area both in nature and in scope. Catchment areas ST, EC, and EC, with well-developed higher-stage enrolment, will not experience much change, except perhaps for a slight increase in enrolment rates for the relevant age-groups. However, in other catchment areas, especially EK, BS, GR and CL, enrolment in higher-stage education may increase by two or even three times the 1971 figures. Finally, the projections must be considered within the context of the current second-level educational reform and the policy of upgrading some former junior vocational schools.[1]

In Chapters V and VI, possibilities will be examined for the rationalization of the first- and second-level school networks in the light of this projected educational demand.

1. These schools should offer both lower and higher stages and *at least three* higher-stage alternatives.

V. Proposals for the rationalization of the first-level school network

Following the analysis and diagnosis of the first-level school network (Chapter II) and with the results of the 1976 projections of first-level enrolment (Chapter IV), the purpose of the present chapter is to examine how the existing school network might be rationalized.

Several schemes could be considered, some placing emphasis on social factors, others on economic factors and still others on pedagogical factors. Furthermore, rationalizing a network may not imply just the 'consolidation' of existing schools (by setting a minimum standard of size and phasing out the smallest accordingly), but could also involve the division of those schools considered too large from pedagogical, administrative or economic viewpoints. However, it was not possible within the scope of this report, in view of the means available,[1] to evaluate the full range of possibilities. It was necessary, therefore, to favour certain rationalization criteria and so attention was confined to the consideration of two main schemes:

1. Rationalization within the framework of the national policy which excludes the one-teacher school;
2. Rationalization with acceptance of the one-teacher school.

1. First scheme: rationalization excluding the one-teacher school

The criteria applied for consolidation are essentially those from the school network policy adopted in Ireland and summarized in Chapter II, page 19.

A. METHOD

Rationalization is envisaged in two phases; the first deals with the rapid consolidation of very small schools in the short term, and the second outlines proposals for further improvement of the network in the medium term in the light of the projected educational demand in 1976 for the different catchment areas.

These short- and medium-term proposals are based on a classification (typology) of schools under the following headings:

1. Schools with enrolments of less than seventy-five and those with enrolments over seventy-five.
2. Urban and rural schools.
3. 1971 enrolment figures and the percentage change over the 1966-71 period.
4. Percentage population change for each school area during the last inter-census period.
5. The year each school was built, extended, renovated or consolidated.
6. Accommodation by classroom and type of structure (permanent or pre-fabricated).
7. Schools' heating and water supply systems.
8. School grounds.

In addition, the rate of urban development and the level of employment in agriculture was considered for each school catchment area and the population trend estimated for each town.

A detailed analysis of each school of less than seventy-five pupils was made, including the examination of the characteristics of neighbouring schools and of possible problems emerging from any transport proposals. In this regard, the geographical location of the schools on a relief and communications map was fully considered. Thus the preparation of proposals was highly empirical.

B. SHORT-TERM PROPOSALS

From this analysis and by further iterative processes, the consolidation proposals detailed in Table 36 were made. Table 37 summarizes these proposals and Map 7 gives the geographical location of those schools for retention and phasing out, and also of new schools to be built.

Thus, implementation of the consolidation proposals would involve phasing out fifty-four small schools, or nearly half the present total of 107.

Obviously, implementation is possible only with the agreement of the various interested parties and it must be stressed that the proposals in this report are to be considered solely as a reference framework for possible negotiations at the local level concerning an actual consolidation programme.

1. In this case resources were necessarily extremely limited.

TABLE 36 Possible consolidation of schools with under seventy-five enrolment (1971 figures)

		Consol enrolm	Teachers	School size
ST	Tugnagall 36, Carney (GR) 32, to *Rathcormac* 40	108	3	120
	Calry 44 to *Danalh* 112	156	4	160
	Knocknarea 32 between *Strandhi* 112 (+ 16) and *ST* 49 (+ 16)	128	4	160
	Killmacowen 38 between *Carraroe* 115 (+ 19) and *Ballisodare* (+ 19)	134	4	160
BM	Woodfield (P) 13, Leyney (P) 9 to *New Collooney Central* (P)	113	3	120
	Keash 56 to *Culfadda* 57[1]	113	3	120
	Killaville (GT) 61, Doocastle (TC) 24 to *Bunnadden* 35	120	3	120
	Lisaneena 60 to *Ballinacarrow* 49	109	3	120
	Carrowreagh 28, Carrigans 30, Knockminna 29 to *Ballymote* (74 and 94)	255	3	120 B
			3	120 G
TC	Cloonagh 26 to *Curry* 107	133	4	160
	Castlerock 48, Benada (B) 23, Drumna 37 (of which 19) to *Benada (G)* 74	164	4	160
	Carniara 24, Carrowmore 54, Achonry 66 to *New Achonry Central*[2]	144	4	160
	Killoran 15 to *Rockfield* 61	76	2	80
	Tubbercurry (P) 9 to *New Collooney Central* (P), Doocastle 24 to *Bunnadden* (BM)			
TC	Kilglass 47 to *Quigabar* 61	108	3	120
	Stokane 52, Culleens 53 (of which 27) to *Corballa* 86	165	4	160
EK	Gleneaskey 49, Gortnamara 15, Culleens 53 (of which 26) to *Dromore West* 89	179	4	160
	Killeenduff 54, Owenbeg 72, Laskey 49 to *New Easkey Central*	175	4	160
	Kilrusheiter 42 to *Templeterrace* 49	91	3	120
	Skreen (P) 14 to *New Collooney Central* (P)			
BS	Dromard 27, Ballylig 57 to *High Park* 105	189	4	160
	Killmacowen (ST) 38 between *Ballisodare* 123 (+ 19) and *Carraroe* (ST) (+ 19)	142	4	160
	Lackagh (CL) 27, Collooney 22 between *Collooney (B)* 85 (+ 24) and *Collooney (G)* 78 (+ 25)	212	3	120 B
			3	120 G
	Woodfield 13, Leyney 9, Tubbercurry 9, Ballisodare 17, Riverstown 29, Skreen 14 and Collooney 18 to *New Collooney Central* (P)[3]	109	3	120
GR	Carns 29 to *Grange* 105	134	3	120
	Mullaghmore 19, Castelgal 45 to *Cliffony* 46	110	3	120
	Drummons 25, Derrylahan 42 to *Ballintrillick* 31	98	3	120
CL	Ballindoon 36, Killmactranny 45 to *Highwood* 30[4]	111	3	120
	Mount-town 18 (of which 9), St. James' Well 52 (of which 26) to *Geevagh* 59	94	2	80
	Mount-town 18 (of which 9), St. James' Well 52 (of which 26) to *Gleann* 51	86	2	80
	Coolbock 29, Knockalassa 20 to *Riverstown* 86	135	4	160
	Bloomfield 26 to *Sooey* 50	76	2	80
	Kilross 27 to *Ballintogher* 121 (+ Sooey)	148	4	160
	Riverstown (P) 29 to *New Collooney Central* (P), Lackagh 27 to *Collooney* (BS)			
GT	Cloonloo 29 to *Mullaghroe* 90	119	3	120
	Annaghmore 51 to *Gorteen* 55	106	3	120
	Killaville 61 to *Bunnadden* (BM)			

1 Keash after recent amalgamation with Carrowcrory has equal enrolment with Culfadda and is located on a more important road. However, the consolidation of these two schools at Culfadda is based on the fact that Keash is located right against Keashcorran and Brackhieve mountains whereas Culfadda is more at the centre of the population for that area.

2 Achonry after recent amalgamation has sixty-six pupils and is located off the main road; the area of these three schools is one of strongly declining population which will shortly only support one school of the required minimum size; it would seem that a new central school should be located on the main road close to Achonry Creamery, a centre where some development is projected.

3 All these Protestant schools are small and their religious authorities have expressed the desire for central amalgamation.

4 Killmactranny is in a catchment area in another county but should be considered here.

5 On phasing out Mount-town and St. James' Well schools, some would move towards Geevagh and some towards Gleann.

B = boys; G = girls; P = Protestant.

The consolidation proposals summarized in Table 37 are indeed quite radical, involving school closings by catchment area ranging from 40 to 60 per cent, with the exception of ST. The major effect of such consolidation would be to increase the average size of schools and more closely relate their distribution to that of the population throughout the county.

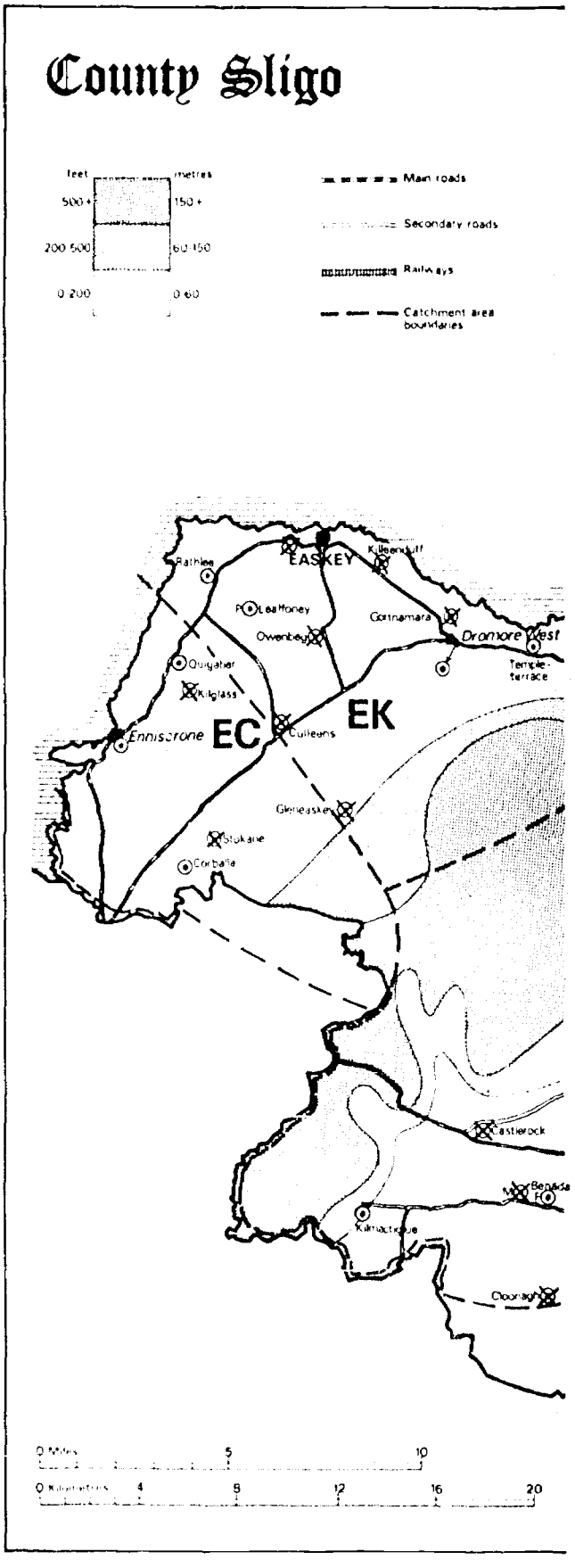
Comparison by catchment area of the available pupil-places after consolidation (supply) against the projected enrolments for 1976 (potential demand) indicates certain discrepancies. However, it should be remembered that on the supply side standard classrooms, by regulation, have forty pupil-places each, while the maximum number of pupils recommended per classroom remains at thirty-five. The correction of this apparent imbalance is examined later when additional accommodation is considered (see p. 60).

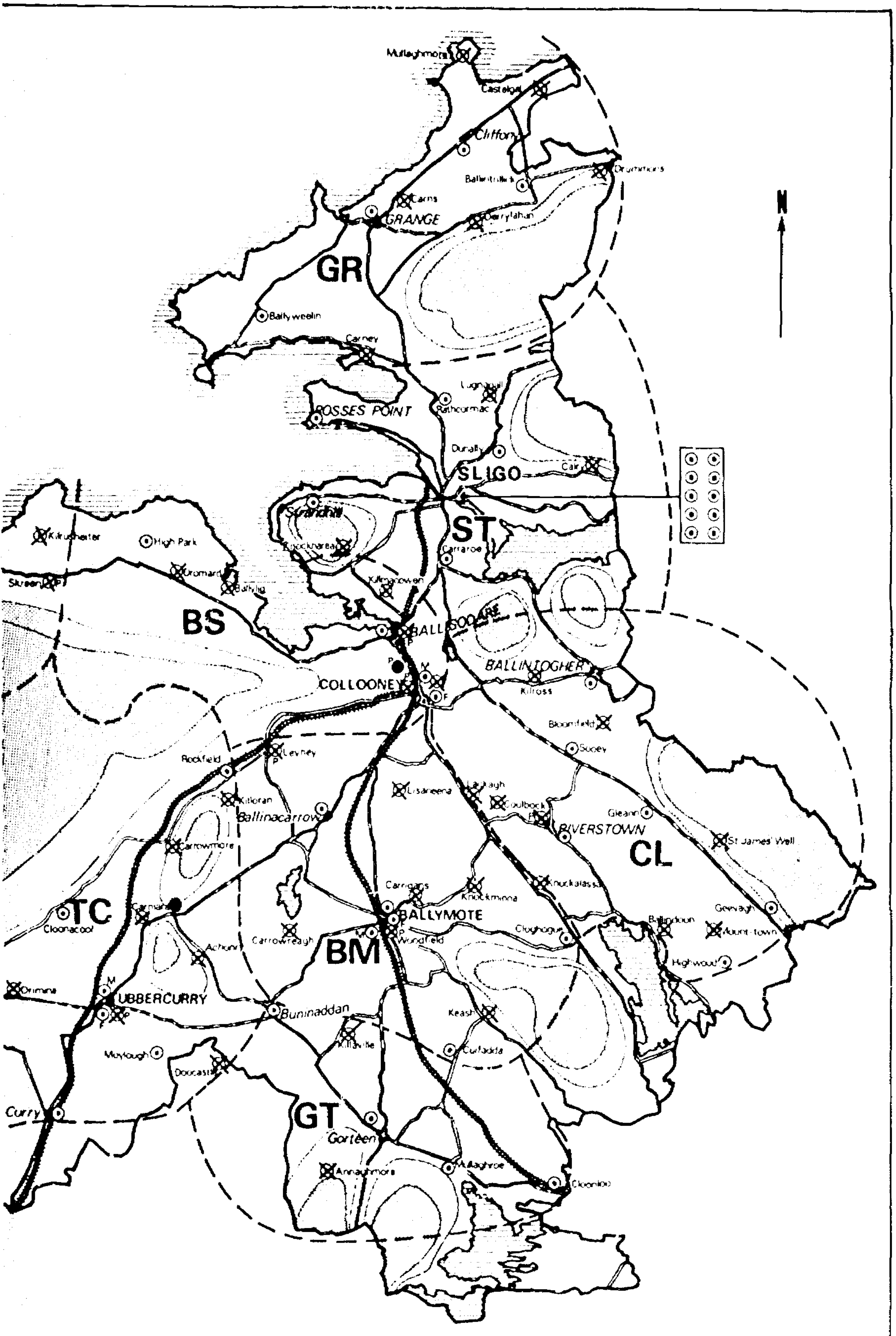
C. CONSOLIDATION EFFECTS

Consolidation reduces costs by improving the pupil/teacher ratios, but increases school transport and accommodation costs. Effects on recurrent costs are summarized in Table 38.

Map 7. Rationalized first-level school network, 1976

- First-level school for development
- First-level school for phasing out
- First-level school (new) to be built
- Protestant





N
Mullaghmore
Cliffony
Carns
GRANGE
Derrylahan
GR
Ballyweelin
Carney
ROSSES POINT
Rathcormac
Dunally
SLIGO
ST
Strandhill
Carraroe
High Park
Dromard
BS
BALLISODARE
BALLINTOGHER
COLLOONEY
Kilross
Bloomfield
Sooey
Rockfield
Leyney
Ballinacarrow
Carrowmore
Lisaneena
Gleann
RIVERSTOWN
St James' Well
CL
Carrigans
Knockminna
BALLYMOTE
Woodfield
Cloghogue
Geevagh
Highwood
TC
Cloonacool
Achonry
Carrowreagh
BM
UBBERCURRY
Buninaddan
Keash
Culfadda
Moylough
Curry
GT
Gorteen
Annaghmore
Mullaghroe
Cloonloo

TABLE 37. Possible consolidation of County Sligo first-level schools

		ST	BM	TC	EC	EK	BS	GR	CE	GT	Total
Enrolment 1971		3 244	748	1 040	381	603	570	457	661	286	7 990
No. schools 1971		18	14	18	5	12	10	10	15	5	107
No. schools under 75 enrolment (1971)		6	11	15	3	10	6	8	13	4	76
No. schools to phase out		3	7	10	2	8	6	6	9	3	54
No. schools remaining		15	7	9	3	5	5	4	6	2	56
Consolidated schools size[1]											
Teachers	Classrooms										
2	80	2	–	3	—	1		—	3	—	9
3	120	4	7	2	1	2	3	4	1	2	26
4	160	5	–	4	2	2	2	—	2	–	17
5	200	–	–	–	–	–	–	–	–	–	–
6	240	–	–	–	–	–	–	–	–	–	–
6+	240+	4	–	–	–	–	–	–	–	–	4
Pupil places		3 280	840	1 120	440	640	680	480	680	240	8 400
Projected enrolment 1976		2 860	548	1 209	431	712	474	451	476	311	7 472[3]
Enrolment change 1971–76[4]		384	200	+ 169	+ 50	+ 109	96	6	185	+ 25	518
Percentage enrolment change 1971–76		12	27	+ 12	+ 12	+ 12	17	1	28	+ 11	6

1. New central schools at Achonry, Easkey, Collooney (Prot.).
2. Standard classroom size: forty pupil-places, one teacher per classroom.
3. Adding in Killmac transfers for centralization at Highwood would increase this figure beyond 7,500.
4. See participation target (Table 32) for cause of enrolment change, e.g. BM balance between increased kindergarten enrolment and earlier movement to the second level proves negative.

For comparison, cost effects are shown separately for all-county schools and for the consolidated schools. It is seen that there is practically no change in total expenditure for either group. Cost-wise, the rationalization proposal simply causes a transfer of the savings from better utilization of teachers in the consolidated schools (pupil: teacher ratio changes from 24.7 to 29.8) to the provision of transport for those pupils whose schools are phased out.

Accordingly, the percentage of total expenditure on teachers decreases from 94 per cent to 84 per cent for all-county and to 79 per cent for consolidated schools, meanwhile the share of over-all expenditure on transport jumps to 15 and 20 per cent respectively, increasing the proportion of pupils carried from 10.6 to 32 per cent of total county enrolment.

The over-all unit cost per pupil remains the same for all-county and consolidated schools. However, the teacher cost is substantially reduced from £63 to £53 per pupil for the consolidated schools and it is this saving which enables the expenditure on transport to be increased significantly from £3 to £13 per pupil.

Accommodation costs due to the consolidation are summarized in Table 39. It is seen that the cost of additional accommodation attributable to the consolidation is £92,500. This is an overestimate since some accommodation assessed as traditional-type buildings would be provided (as will be seen later) as less expensive pre-fabricated buildings, and no account has been taken of the value of closed schools.

TABLE 39. Effects of proposed consolidation on accommodation costs (in £ Sterling, 1971 prices)

Classrooms	Accommodation reqd for consolidation		Essential accommodation[2]		Additional accommodation attributable to consolidation	
	Number	Cost	Number	Cost	Number	Cost
Trad.	40	148 000	21	77 700	19	70 300
Pre-fab.	32	59 200	8	37 000	24	22 200
TOTAL	72	207 200	29	114 700	43	92 500

1. About £3,700 per room for a 600 sq. ft. standard classroom (£6.16 per sq. ft. using conventional building techniques). Department of Education Data, 1971. (General purpose room is larger in size.)
2. This includes replacement accommodation necessary because of the age and condition of certain schools, and general-purpose rooms required if the reformed curriculum is to be effectively introduced.

TABLE 38. Effects of the proposed consolidation on recurrent costs (in £ Sterling, 1971 prices)[1]

		Teacher cost		Non-teacher cost				Over-all cost	
		Total	Per pupil	Transport	Per pupil	Other	Per pupil	Total	Per pupil
1971	All schools	431 475	54	21 100	3	7 990	1	460 565	58
	Consolid. schs	268 299	63	12 075	3	4 227	1	284 601	67
1976	All schools	385 974	48	64 900	8	7 990	1	458 864	57
	Consolid. schs	222 798	53	55 875	13	4 227	1	282 900	67
Change	All schools	45 501	6	+ 43 800	+ 5			1 701	…
	Consolid. schs	45 501	10	+ 43 800	+ 10			1 700	…

1. For equal cost comparison, figures for 1971 (as if natural consolidation took place) are used.

TABLE 40. Possible consolidation effect on staffing and transport

	Enrolment in consolid. schools	Staff 1971		Avge P. T ratio 1971		Staff proposed 1976		Avge P. T ratio 1976		Teachers for redeployment: School		Teachers for redeployment: CA		Approx. additional pupils for transport[1]	
		T	U	School	CA	T	U	School	CA	T	U	T	U	School	CA
ST	108	6	–	18.1		4	–	27.0		2	–			68	
	156	4	1	30.1		4	1	30.1		–	–			44	
	128	4	–	32.0		4	–	32.0		–	–			32	
	134	4	–	33.5	27.7	4	–	33.5	30.9	–	–	2	–	19	163
BM	113	3	1	28.2		3	1	28.2		–	–			56	
	120	5	1	20.0		4		30.0		1	1			85	
	109	4	–	27.2		4	–	27.2		–	–			69	
	255	9	2	23.2	23.9	8	–	31.2	31.9	1	2	2	3	87	288
TC	133	6	–	22.2		4	–	33.2		2	–			26	
	164	7	–	23.5		6	–	27.3		1	–			85	
	144	5	1	24.0		5	–	28.8		–	1			78	
	76	3	–	25.3	23.5	3	–	25.3	28.7	–	–	3	1	15	204
EC	108	4	–	27.0		4	–	27.0		–	–			47	
	165	6	–	27.5	27.3	5	–	33.0	30.3	1	–	1	–	79	126
EK	179	6	1	25.6		6	–	29.8		–	1			90	
	175	5	2	25.0		5	1	29.2		–	1			126	
	91	4	–	22.7	24.7	3	–	30.3	29.7	1	–	1	2	42	258
BS	189	5	2	28.4		5	1	31.5		–	1			84	
	142	2	2	35.5		2	2	35.5		–	–			19	
	212	6	1	30.3		7	–	30.3		–	–			27	
	109	7	–	15.5	26.3	4	–	27.2	31.0	3	–	3	1	90	220
GR	134	5	–	26.8		4	–	33.5		1	–			29	
	110	5	–	22.0		4	–	27.5		1	–			64	
	98	4	1	19.6	22.8	3	–	32.6	31.1	1	1	3	1	67	160
CL	111	5	1	18.5		4	–	27.8		1	1			81	
	94	4	–	20.8		3	–	31.3		1	–			35	
	86	3	–	28.7		3	–	28.7		–	–			35	
	135	6	–	22.5		5	–	27.0		1	–			49	
	76	3	–	25.3		3	–	25.3		–	–			26	
	148	4	2	24.7	23.2	4	1	29.6	28.3	–	1	3	2	27	253
GT	119	4	1	23.8		4	–	29.7		–	1			29	
	106	3	1	26.5	25.0	3	1	26.5	28.1	–	–	–	1	51	80
TOTAL	4 227	151	20	24.7		134	8	29.8				18	11		1 752

T = trained, U = untrained, CA = catchment area, P. T ratio = pupil teacher ratio

1. Additional transport is given against the catchment area to which pupils will be transported (1971 figures)

However, the proposed rationalization, in its totality, must be justified mainly on pedagogical and social grounds. Thus, if it is finally considered that the correction of many existing weaknesses through modernization (improvement of transport provision, reduction of unqualified teachers,[1] improvement of pupil/teacher ratio and the supply of facilities suitable to the introduction of the reformed curriculum), justifies the additional cost involved, then this alternative should be adopted. Tables 40 and 41 summarize the effects of the consolidation proposals.

It is also useful, when considering an order of priorities, to classify the schools to be phased out into three groups as shown in the following sections.

1 Group 1

This group consists of those schools where phasing out would result in a cost reduction and improved pedagogical conditions: BM, Carrowreagh, Carrigans, Knockminna; TC, Cloonagh; GR, Carns; CL, Mount-town, St. James' Well, Coolbock, Knockalassa, Kilross; GT, Cloonloo.

The group consists of eleven small schools with less than thirty-five pupils each, in five catchment areas, whose pupils would be transported to seven larger schools. The resultant increases in the pupil/teacher ratios range from 20 to 50 per cent, with an average for the group of 30 per cent.

This increase in the pupil/teacher ratios would enable the unit teacher cost per pupil to be decreased from the present £54 to £37.8. This would mean a total teacher cost saving of about £16,500 annually.[2]

However, additional transport required for 282 pupils at £25 each amounts to increased costs of £7,000. Also eleven additional classrooms, including general-purpose rooms (pre-fabricated) at a total cost of about £40,000, would be

1. It is expected that a policy of training unqualified teachers and replacement of normal wastage with qualified teachers, as far as possible, will be implemented.

2. £16.2 × 1018 pupils

TABLE 41. Additional classroom accommodation required at the smaller consolidated schools

	Consolidated schools	Consol enrolm (1971)	Existg classrooms A	Existg classrooms B	Year of constrc or renov	Add accom required: Class rooms	Add accom required: Other	Existing site in acres	Accom closing A	Accom closing B	Year of constrc or renov
ST	Radheormac	108	2		1952	1	1	1.0	4	–	1940
	Dunally	156	2	1	1969	2	1	2.5	2	–	1920
	Strandhill	128	2	1	1967	1	1	1.0	2	–	1900
	Carraroe	134	3	–	1962	1	1	2.0	2	–	1898
BM	Culfadda	113	2	–	1954	1	1	0.7	2	–	1965
	Bunnadden[3]	120	2	–	1900	3	1	0.4	4	–	1931
	Ballinacarrow	109	2	–	1951	1	1	1.0	2	–	1955
	Ballymote	255	5	1	1969	2	1	1.2	5	–	1953
TC	Curry	133	7	–	1968	–	1	0.1	4	–	1879
	Benada	164	5	–	1953	–	1	1.0	7	–	1968
	Achonry[3]	144	2	–	1968	4	1	0.7	6	–	1965
	Rockfield[3]	76	2	–	1902	–	1	0.5	2	–	1909
EC	Quigabar[4]	108	2	–	1880	3	1	0.2	2	–	1901
	Corballa[4]	165	4	–	1959	–	1	2.0	2	–	1890
EK	Dromore West[4]	179	4	–	1963	–	1	0.5	5	–	1950
	Easkey[3]	175	2	–	1893	4	1	0.6	4	3	1965
	Templeterrace[4]	91	2	–	1962	–	1	0.5	2	–	1961
BS	High Park	189	2	2	1970	1	1	0.7	4	–	1953
	Ballisodare	142	3	1		1	1	0.5	2	–	1898
	Coffooney	212	6	1	1970	1	1	1.5	4	–	1940
	Coffooney (P)[3]	109	2		1850	3	1	0.5	10	–	1900
GR	Grange	134	3	1	1970	1	1	1.0	2	–	1951
	Cliffony[3]	110	4	–	1914	3	1	1.0	4	–	1950
	Ballintrillick	98	2	–	1958	1	1	1.0	4	–	1934
CT	Highwood	111	2	–	1898	3	1	1.0	4	–	1935
	Geevagh	94	3	–	1930	–	1	3.5	2	–	1889
	Gleann	86	2	–	1959	–	1	0.5	2	–	1893
	Riverstown	135	3	–	1929	1	1	1.0	4	–	1928
	Sooey	76	2	–	1956	–	1	1.0	2	–	1947
	Ballintogher	148	4	–	1970	–	1	1.0	2	–	1919
GT	Mullaghroe	100	3	–	1969	–	1	0.5	2	–	1964
	Gorteen[3]	106	2	–	1885	2	1	0.1	2	–	1885
	TOTAL		93	8		40	32		107	3	

A = traditional; B = pre-fab
1 Replacement required
2 New central school
3 Renovation required
4 Better sited school required later

required. Allowing for the service life[1] of this accommodation, the annuated capital cost would amount to £4,000. Thus the additional cost resulting from the consolidation proposals would be £11,000.

Over-all, the net annual savings achieved through consolidation would be £5,500, i.e. 10 per cent of the total budget for this group of schools. This is a considerable saving, which is further enhanced because it is accompanied by improved pedagogical conditions. The number of unqualified teachers employed would be reduced from five to one, and teachers would have responsibility for a lesser range of grades.

Furthermore, out-dated schools without adequate heating and water supply facilities would be closed and their pupils might enjoy modern facilities elsewhere; for instance, *of the twenty-one classrooms proposed for closing, six date* from the nineteenth century and six others are over forty years old.

In conclusion, consolidation of this group (A) of eleven small schools merits priority attention because of the cost savings and improved pedagogical conditions which would result.

ii. Group B

This group consists of thirty-two small or medium-sized schools in eight catchment areas, where phasing out would result in equivalent costs but improved pedagogical conditions: ST, Lugnagall, Carney; BM, Killaville, Doocastle; TC, Castlerock, Benada, Drimina, Carniara, Carrowmore, Achonry; EC, Stokane, Culleens; EK, Gleneaskey, Gortnamara, Killeenduff, Owenbeg, Easkey, Kilrusheiter; BS, Dromard, Ballylig, Woodfield(P), Teyney(P), Tubbercurry(P), Ballisodare(P), Riverstown(P), Skreen(P), Col-

1 At a reasonable interest rate

looney(P); GR, Mullaghmore, Castelgal, Drummons, Derrylahan; CL, Ballindoon.

Although in each case consolidation appears justified by the standards and criteria adopted in this study, the fact remains that the relative dispersion of the pupils and schools causes the savings in teacher costs (due to better pupil/teacher ratios), to be offset by increases in transport costs and additional capital expenditure on accommodation.

Pupil/teacher ratios would be increased by 15 per cent in some cases and as much as 75 per cent in others, with an average for the group of some 25 to 30 per cent. The consequent teacher cost saving per pupil is about £15, or a total of around £26,500 annually.[1]

On the other hand, additional transport costs would amount to about £26,000.[2] The capital costs for new accommodation, which must also be added, are already indispensable in several cases, irrespective of consolidation, because of the obsolescence of existing premises and facilities. However, there are some exceptional cases where schools built during the last decade are also proposed for closing. On balance and from the most optimistic viewpoint, the consolidation proposals for this group of schools (B) may be considered as not causing increased costs.

Since the proposals for this group cannot be entirely justified by economic considerations, the question remains as to whether they could be justified from the pedagogical and social viewpoints.

Firstly, consolidation would enable schools to be modernized and have adequate water and heating systems installed; obsolete premises would be phased out. It also implies adding multi-purpose classrooms, thus facilitating the introduction of the new curriculum in all the consolidated schools. Furthermore, by eliminating one-teacher schools—however justified these may be in some other countries—and replacing them with two or three-teacher schools, the pedagogical conditions would be considerably improved. Finally, these consolidation proposals would also provide more equality of educational opportunity for pupils living in rural areas with very scattered populations who, owing to their remoteness and consequent travel costs, have been disadvantaged in the supply of second-level education as well. On balance therefore, it seems consolidation could be justified on pedagogical and social grounds.

iii. Group C

This group consists of eleven schools in seven catchment areas: ST, Calry, Knocknarea, Killmacowen; BM, Keash, Lisaneena; TC, Killoran; EC, Kilglass; BS, Lackagh, Collooney; CL, Bloomfield; GT, Annaghmore.

Comments made for group B are also true for group C with the proviso that the consolidation proposals would unquestionably involve extra costs in this case.

The proposals for this group do not reduce teacher costs since, as is shown in Table 40, the pupil/teacher ratios remain about the same for 1976 as for 1971, and the decrease in enrolments in certain catchment areas is not completely offset by a reduction in teaching staff. In addition, transport would be required for over 400 additional pupils, causing further expenditure of over £10,000. The capital costs for additional accommodation must also be taken into account.

The net result is that the consolidation proposals of this third group cannot be justified on cost grounds. It is necessary, therefore, to assess whether the expected improvement in the quality of education might justify the increased costs incurred.[3] Unfortunately, within the scope of this analysis, it is not possible to make this evaluation. The most that can be done is to give an over-all assessment of the general coherence of these proposals[4] for the short and medium terms in the light of the earlier analysis of both the school network and the demographic structure.

D. THE SCHOOL NETWORK IN THE MEDIUM TERM

Lacking precise population statistics and sufficiently detailed information on the rate of social and economic development for each catchment area,[5] it is difficult to estimate enrolment accurately for each school up to 1981. To make decisions on location it is necessary, however, to prepare a rough outline of the development of the school network in the medium term.

Such an outline has accordingly been drawn up by resorting to certain principles of school network policy (which are open to discussion) and by taking account of the population trends in the various catchment areas.

i. Principles

(a) It is generally agreed that decisions for the long-term location of schools should rely mainly on the rate of population growth in the various school areas, ensuring that buildings are located in the most dynamic centres. The implicit assumption is that if the school is to become, as it should, a community centre for both young and adult generations, then it must be located in an active environment and be easily accessible.

(b) Accordingly, it is desirable to locate schools in towns, in villages with growth potential, or near to the main communication routes.

(c) On this basis, some schools in remote and declining areas, proposed for consolidation in the first phase, would themselves close later in a second phase of consolidation. A decision would also have to be made on setting a maximum enrolment limit for the development of the remaining schools.

(d) Demographic criteria are used for estimating the growth potential of the various areas.

ii. Approach and assumptions

The analysis focused on:

(a) Identification of the school areas with static or declining populations.

1. £15 × 1,763 pupils
2. 1,039 pupils at £25 each
3. i.e. while moving further away from the economic optimum, to what extent is there compensatory movement towards the pedagogical optimum?
4. As may be remembered, these are based on mandatory criteria
5. 1971 population census figures were not available at the time of writing

(b) Identification of viable growth points whose schools are likely to survive the second phase of consolidation.

It emerges from the analysis that two towns, Sligo Town and Tubbercurry, will continue to grow at the fastest rate and in so doing will influence to a great extent the over-all development of their catchment areas. Table 25 (p. 46) gave data on the total population change by catchment area from 1951 to 1966, on urbanization and on employment in agriculture.[1] It may also be observed from this table and Map 6 (p. 45) that the EC catchment area appears to have reached a stable population. An increase may occur here owing to the development of tourist activities and also to the geographic proximity of the growing capital town of Ballina in the neighbouring county. In brief, ST, TC and EC will probably improve their population position compared to the remaining catchment areas in the county. In fact, BM, EK, BS, GR, CL and GT may experience steadily decreasing school populations.[2]

It has also been assumed that any schools located in towns, villages or on major communication routes automatically enjoy an advantage and will benefit from the phasing out of other schools to maintain or even increase their enrolments.

TABLE 42. Medium-term trends and nature of accommodation to be provided for schools (excluding ST)

		Enrolment trend and consolidation		Nature of first-phase consolidation building
		1971	1976	
BM	Culfadda	113	80	pre-fab
	Buninadden	120	90	pre-fab
	Ballinacarrow	109	79	pre-fab
	Ballymote (B + G)	255	201	temporary
TC	Curry	133	152	permanent
	Benada	164	183	permanent
	Achonry	144	161	new central school
	Rockfield	76	95	temporary
EC	Quigabar	108	125	permanent
	Corballa	165	182	permanent
EK	Dromore West	179	206	temporary
	Easkey	175	202	new central school
	Templeterrace	91	118	temporary
BS	High Park	189	165	temporary
	Ballisodare	142	118	temporary
	Collooney	212	197	temporary
	Collooney (P)	109	85	new central school
GR	Grange	134	102	pre-fab
	Chffony	110	109	pre-fab
	Ballintrillick	98	97	pre-fab
CL	Highwood	110	80	pre-fab
	Geevagh	94	63	pre-fab
	Gleann	86	55	pre-fab
	Riverstown	135	105	pre-fab
	Sooey	76	45	pre-fab
	Ballintogher	148	117	pre-fab
GT	Gorteen	139	102	temporary
	Mullaghroe	106	109	temporary

iii. Results

In the light of the foregoing assumptions and taking account of projected enrolments for 1976, we may examine the prospects of the smaller schools consolidated in the first phase (or short term). This is the purpose of Figure 4, which plots the enrolment trend to 1981 in two and three-teacher schools. It is seen that the enrolment decrease may be such in some of these schools that the minimum size figure will no longer be met even by 1976. Guidelines on the nature of accommodation to be provided in the light of medium-term trends are given in Table 42 for all catchment areas, except ST which is discussed separately in a later section.

Table 42 shows that of the twenty-eight schools consolidated in the first phase, only nine may actually increase their enrolments between 1971 and 1976, apart from merely absorbing the enrolments of the phased-out schools. Of these nine, increased enrolments in three EK schools are largely due to the higher participation rates of 4- and 5-year-olds, which were rather low in this area. The remaining six schools are in the TC and EC catchment areas where prospects for population growth appear fairly favourable.

By contrast, enrolments in the remaining nineteen consolidated schools may remain static or decline. As the enrolment size of consolidated schools in 1976 may vary from 45 to over 200, the urgency or priority of the second-phase consolidation cannot as yet be usefully assessed.

However, as mentioned earlier, the medium-term prospects outlined in Table 42 can be useful in reaching decisions on the type of accommodation to be provided in the first phase of consolidation, i.e. whether construction should be permanent, temporary or pre-fab. The table shows that of all twenty-eight new buildings proposed in the first-phase of consolidation, seven might be permanent, nine temporary and twelve in light pre-fabricated materials.

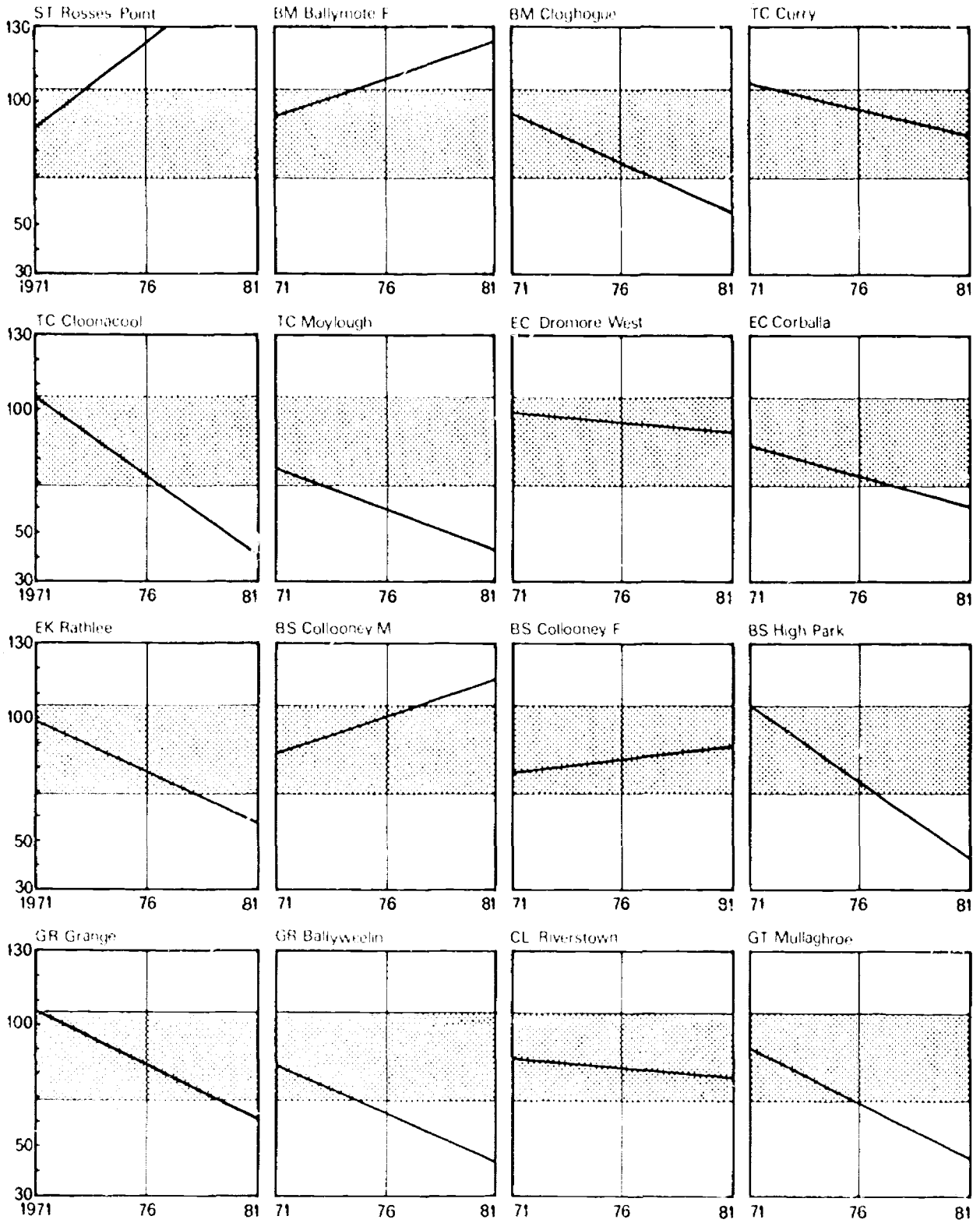
1 Industrial development in Tubbercurry town has been fairly rapid and existing plans indicate further development (See Table 24). A tendency for small farmers to become industrial workers, while retaining their farms, may continue to the mutual benefit of agriculture and industry in this catchment area.

2 This estimate is based on 1961–66 trends and it could well happen that in some areas, perhaps BS, reversed trends could develop.

FIGURE 4. *(Opposite) Enrolment trend to 1981 in two- and three-teacher schools.*

NOTES: Below the shaded area only two teachers are justified, the upper limit of the shaded area represents the four-teacher threshold. Extrapolating present trends to 1976, enrolments at Moylough (TC), Ballyweelin (GR) and Mullaghroe (GT) will have decreased to the point where only two-teacher schools are warranted; by 1981 this may also be the fate of Cloghogue (BM), Cloonacool (TC), Corballa (EC), Rathlee (EK), High Park (BS) and Grange (GR).

Taking the first three schools, Mullaghroe will have been consolidated with Cloonloo 29 and will therefore increase in enrolment; Moylough and Ballyweelin must eventually phase out since, in the long term, a continued decline seems inevitable and one-teacher schools are not acceptable. Of the second group, consolidation has been suggested for Corballa (+ 27 of Culleens), High Park (+ Dromard 27, Ballylig 57) and Grange (+ Carns 29). Cloghogue, Cloonacool and Rathlee then remain to be consolidated in the medium term.


ST Rosses Point
BM Ballymote F
BM Cloghogue
TC Curry
TC Cloonacool
TC Moylough
EC Dromore West
EC Corballa
EK Rathlee
BS Collooney M
BS Collooney F
BS High Park
GR Grange
GR Ballywrelin
CL Riverstown
GT Mullaghroe
130
100
50
30
1971
71
76
81

E. THE CASE OF SLIGO TOWN

At present, Sligo Town has some 14,000 inhabitants and ten first-level schools of the following enrolments: 583, 534, 513, 354, 216, 140, 114, 112, 51 and 49.[1]

These schools are fairly well located in relation to the residential areas of the capital. However, with expected expansion, especially in the Cartron, Maugheraboy and Ballytivnan districts, land should be zoned and acquired for building new schools.

Like all developing towns, Sligo Town has two major school-location problems: the scarcity of land in residential areas; and the limited expansion possibilities of the schools, most of which have passed enrolment sizes considered pedagogically desirable.

While the authorities have set seventy-five as the minimum, no maximum enrolment size has been fixed for first-level schools. However, it is desirable that a standard maximum size be set. Experience in Sligo Town indicates that the sixteen-classroom school with 560 to 640 pupil places is maximal. A school of this size should have grounds sufficiently large to accommodate playgrounds, recreation classes and gardens, or be located close to a community centre having these facilities.

The three schools in Sligo Town attended by over 500 pupils were not originally conceived for enrolments of this magnitude. They are already overcrowded, although the growth of the town's population must lead to further pressure for increased enrolments in them.

The time is appropriate for all interested parties to consider the future school network of Sligo Town: educationists, managers, the town engineer, etc. Unfortunately, within the scope of this study, detailed guidelines for the rational development of the network cannot be given.

Only a few general principles can be mentioned which should underlie the development of an urban school network for a town of this size:

(a) An over-all school-zoning and land-purchasing policy should be articulated within the framework of the town development plan.

(b) A norm for the maximum school size should be set; a maximum enrolment size of about 300 pupils (eight classrooms) is suggested, with provision for some future extension.

(c) To encourage the maximum utilization of both school and community facilities by pupils and the general public alike, the location of schools should be planned to form part of an educational, cultural and sporting complex. (First- and second-level recreational facilities; classes for adults; community recreational centres, such as libraries, music auditoria, gymnasia, sports grounds; parks; etc.)

(d) Special care should be taken about safe access to the school, and traffic problems must be fully considered before deciding on school locations.

To summarize, the problem of the school network for Sligo Town must be studied separately, using techniques which essentially pertain to town planning.

2. Second scheme: rationalization with acceptance of the one-teacher school

This main rationalization alternative is not quite so radical in terms of the extent of consolidation required because it includes the smaller one-teacher school. But first, some general comment on attitudes towards this type of school is desirable.

A. GENERAL

There are two opposing points-of-view concerning the one-teacher school:

1. It is pedagogically and economically inferior to the larger school and is to be phased out where possible;
2. In the context of scattered rural populations the important social and cultural role it may play for the whole community and the neighbourly community spirit it can engender in its pupils, balance out any inherent pedagogical or economic inferiority.

The first view was shown to be more suitable for the Irish situation in an OECD study of the mid-1960s.[2] Accordingly, the policy being pursued by the Irish authorities is to phase out one-teacher schools and transport the pupils to larger and more central establishments.

It is of interest, however, to examine the idea of the one-teacher school a little further for its own sake and to test the effect its acceptance in the Irish situation might have on the rationalization of the school map.

The one-teacher school is still found in most countries (though less and less) and its existence bears no relation to the level of economic or cultural development.[3] It exists for administrative, religious, language and demographic reasons. It can be found in many countries for similar reasons to those in France, where each commune is entitled to its own school (though there is a prescribed minimum acceptable enrolment). The desires of local minority religions and language groups, and also the tradition of teaching boys and girls in separate establishments, explain why it still exists in some cases. The principal reason for its existence, however, is to cater for remote, scattered and declining populations.

B. MAIN ADVANTAGES AND DISADVANTAGES

The main pedagogical advantages claimed for the one-teacher school are as follows:

1. The familiar atmosphere and the proximity to the home are better for character-building;
2. Having the same teacher throughout first-level education can be helpful;
3. Individual work necessitated among pupils encourages a certain self-reliance.

Economic advantages claimed are that it is less costly than the boarding school, can be less costly than alternative

1. This last school is an orphanage.
2. *Investment in Education*. Dublin, Stationery Office, 1965. "The Lynch Report".
3. *The one-teacher school*. Geneva, Unesco IBE, 1961.

TABLE 43. Alternative proposals for phasing out

	Schools for phasing out even if one-teacher schools accepted				Schools for phasing out on first alternative (75 minimum) but not necessarily if one-teacher school idea accepted			
ST					Knocknarea	32	Lugnagall	36
					Calry	44		
BM	Woodfield(P)	13	Knockminna	29	Keash	56	Lisaneena	60[1]
	Leyney(P)	9	Carrigans	30				
	Carrowreagh	28						
TC	Tubbercurry(P)	9	Carnara	24	Castlerock	68	Carrowmore	54
	Kilforan	15	Doocastle	24	Drumina	37	Achonry	66
	Benada(B)	23	Cloonagh	26				
TC					Kilglass	47	Stokane	52
TK	Skreen(P)	14	Gortnamara	15	Culleens	53	Owenbeg	72
					Gleneaskey	49	Laskey	49
					Killeenduff	54	Kilrusheiter	42
BS	Ballisodare(P)	17	Collooney	22	Killmacowen	38	Ballylig	57
	Collooney(P)	18	Dromard	27				
GR	Mullaghmore	19	Carns	29	Carney	32	Castelgal	45
	Drumnons	25			Derrylahan	42		
CL	Mount-town	18	Kilross	27	St. James' Well	52	Ballindoon	36
	Knockalassa	20	Riverstown(P)	29				
	Bloomfield	26	Coolbock	29				
	Lackagh	27	Highwood	30				
GT	Cloonloo	29			Killaville	61	Annaghmore	51

1. This school has, in fact, been phased out during the course of the study.

schools involving transportation, and may be the only means of supplying education for the more remote students.

Contrariwise, pedagogical disadvantages named are:

1. Success depends on the organizational and teaching skill of just one teacher;
2. Success is difficult to achieve with the simultaneous organization and teaching of a wide range of pupils of different ages and abilities;
3. The better teacher is not attracted to the remote areas;
4. When the teacher is absent the school closes;
5. The competitive element is less evident and the syllabus is more difficult to cover;
6. It is more difficult to provide a modern curriculum;
7. The smaller school is without modern teaching aids and usually lacks a library and gymnasium.

From the economic viewpoint the smaller school tends to be more costly.

C. REPLACEMENT PROBLEMS

Even when a rational decision is reached on phasing out a one-teacher school, actually closing the building poses big problems. It becomes a clear, ominous and unwelcome sign to a disintegrating community. The social role it may have played, the emotional attachment of parents and the proposed loss of the last visible sign of community self-perpetuation (noisy pupils) has a shocking effect. The proposal to consolidate an alternative centre, particularly if it is beyond commune or parish boundaries, deals local pride and tradition a heavy blow. Implementation, therefore, requires very careful preparation and good community relations work.

Boarding and school transport are the two alternatives open. Because of distance and travel time, transport may also mean the provision of canteen facilities at the central school. Boarding for first-level pupils is a final resort and is not recommended.

D. PROPOSALS FOR RATIONALIZATION

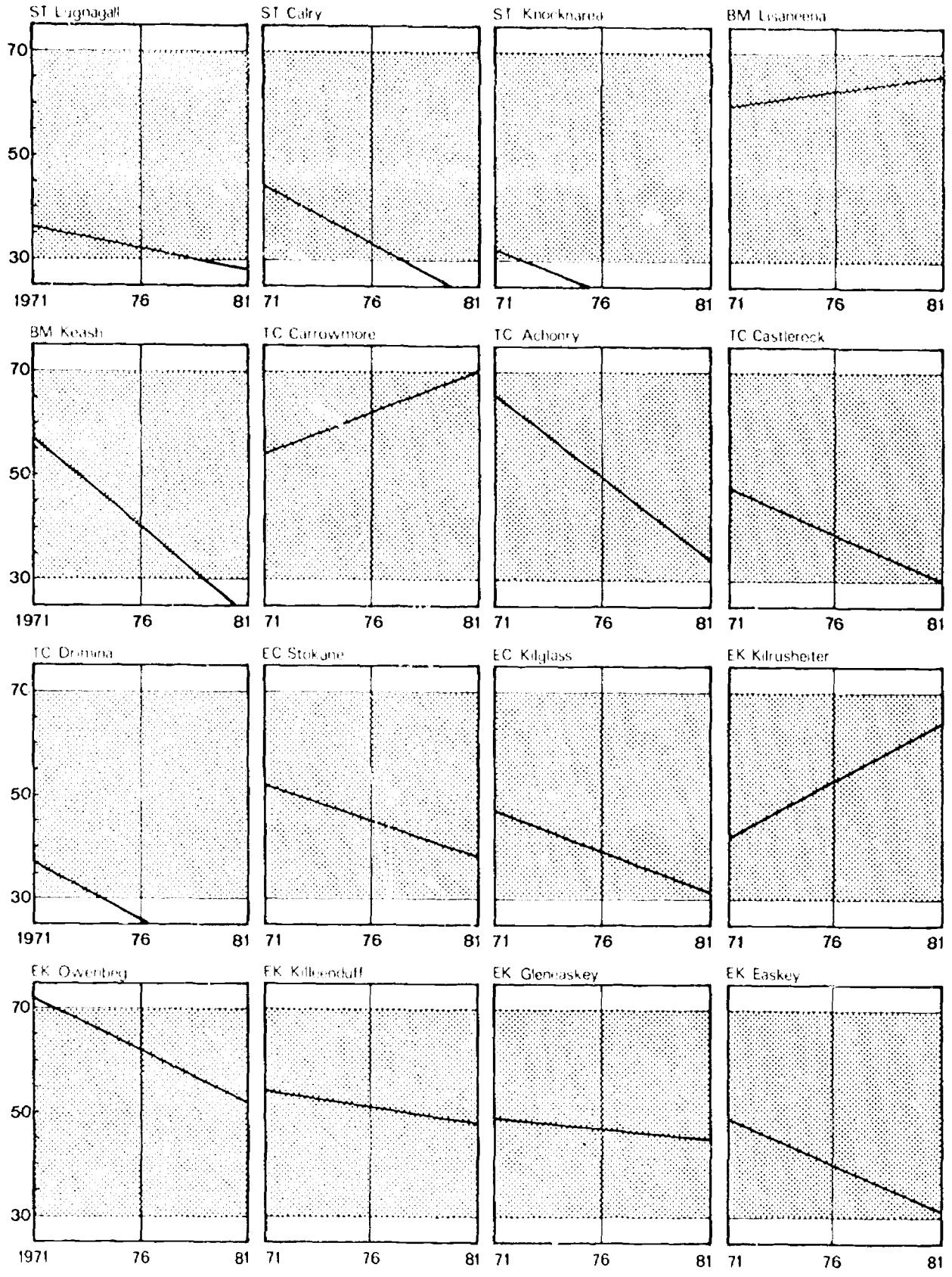
Alternative rationalization proposals are now examined in which the idea of the one-teacher school is accepted. Firstly, it is seen that existing schools with an enrolment of thirty or lower and a declining trend, would be phased out in any case. In Table 43 these schools are listed by catchment area. This table also gives those other schools proposed for phasing out under the first alternative (minimum enrolment seventy-five) but which might not be phased out if the one-teacher school idea were acceptable.

Thus, twenty-nine schools must inevitably be phased out as they cannot become viable as one-teacher establishments. The remaining twenty-six must then be examined more closely for their viability in a one-teacher situation. This is done by assessing each school's prospects against the background of demographic and enrolment trends. A look at other factors, such as the age and condition of accommodation, can give guidelines to priorities for both the one- and two-teacher minimum school-size alternatives.

Before proceeding to examine these schools further, it is seen that the phasing-out of the twenty-nine schools with under thirty enrolment does not have any effect through consolidation on the prospects of the remaining twenty-six.[1] Decisions on all of these fifty-five schools, however, do influence the development prospects of some fourteen other establishments.

Much more detailed information on these twenty-six schools of thirty to seventy-five enrolment is given in Appendix I, Table 7 (p. 105). Against this background

1. With the exception of the Highwood-Ballindoon consolidation.



NOTE: Below the shaded area one-teacher schools become non-viable; the upper limit of the shaded area represents the three-teacher threshold.

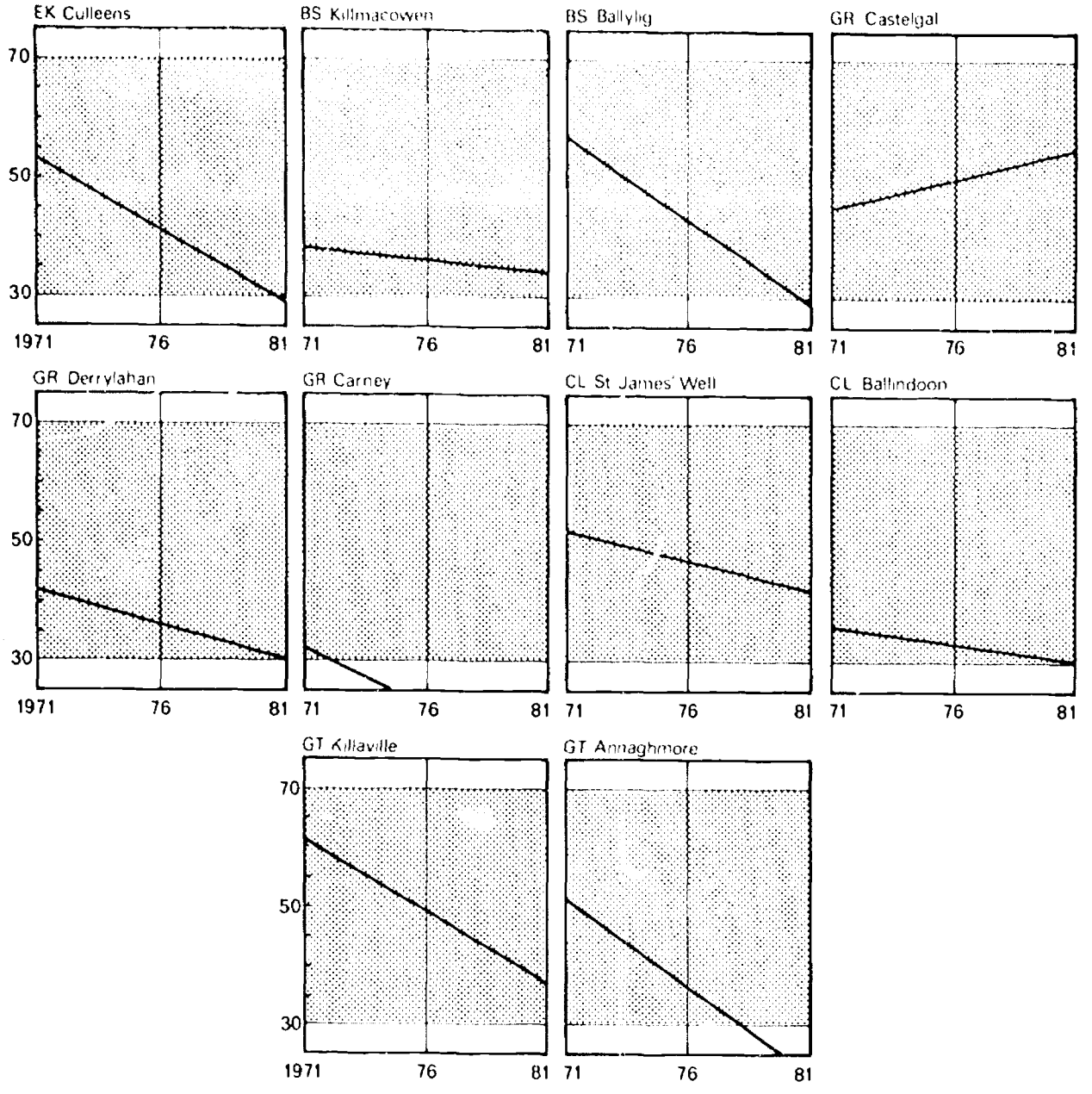


FIGURE 5. *Projected enrolment to 1981 in schools of thirty to seventy-five enrolment*

TABLE 44. Short and medium term consolidation proposals

	Enrolment 1971	No. of schools 1971	No. of schools to phase out in short term	No. of schools to remain in short term	Projected enrolment 1976	No. of schools to phase out in medium term	No. of schools to remain in medium term
ST	3 244	18	1	17	2 860	2	15
BM	748	14	5	9	548	1	8
TC	1 040	18	7	11	1 209	1	10
EC	381	5	—	5	431	—	5
EK	603	12	2	10	712	1	9
BS	570	10	4	7[1]	474	1	6
GR	457	10	4	6	451	1	5
CL	661	15	8	7	476	—	7
GT	286	5	1	4	311	1	3
TOTAL	7 990	107	32	76	7 472	8	68

1. New central school to be established

TABLE 45. Consolidation proposals (short term) under one-teacher school acceptance

	Consolidation		Consolidation
ST	Knocknarea 32 between *Strandhill* 112(+16) and ST49(+16)	GR	Mullaghmore 19 at *Clifton* 46
BM	Woodfield(P) 13, Leyney (P) 9 at *New Collooney Central*		Drummons 25 at *Ballintrillick* 31
	Carrowreagh 28, Carrigans 30, Knockminna 29 at *Ballymote* (74 and 94)		Carns 29 at *Grange* 105
	Doocastle 24 at *Bannadden* 35		Carney 32 at *Rathcormac* 40
TC	Tubbercurry (P)9 at *New Collooney Central* (P)	CL	Mount-town 18 at *Gleann* 51
	Killoran 15 at *Rockfield* 61		Coolbock 29, Knockalassa 20 at *Riverstown* 86
	Benada (B) 23, Drimina 37 at *Benada* (G) 74		Bloomfield 26, Kilross 27 at *Sooey* 50
	Carnara 24 at *Achonry* 66		Lackagh 27 at *Colloonev*
	Cloonagh 26 at *Curry* 107		Riverstown (P) 29 at *New Collooney Central* (P)
EK	Skreen (P) 14 at *New Collooney Central* (P)		Highwood 30 at *Ballindoon* 36
	Gortnamara 15 at *Dromore West* 89	GT	Cloonloo 29 at *Mullaghroe* 90
BS	Ballisodare (P) 17, Collooney (P) 18 at *New Collooney Central* (P)		
	Collooney 22 at *Collooney* B 85 G 78		
	Dromard 27 at *High Park* 105		TOTAL 32 schools consolidated

TABLE 46. Effects of the proposed consolidation on recurrent costs (in £ Sterling, 1971 prices)

		Teacher cost		Non-teacher cost				Over-all cost	
		Salaries	Per pupil	Transport	Per pupil	Other	Per pupil	Total	Per pupil
1971	All schools	431 475	54	21 100	3	7 990	1	460 565	58
	Consolid. schools	147 486	69	7 700	3	2 152	1	157 338	73
1976	All schools	393 819	49	37 660	5	7 990	1	439 469	55
	Consolid. schools	109 830	51	24 250	11	2 152	1	136 232	63
Change	All schools	− 37 656	− 5	+ 16 550	+ 2	—	—	− 21 106	− 3
	Consolid. schools	− 37 656	− 18	+ 16 550	+ 8	—	—	− 21 106	− 10

TABLE 47. Effect of short-term consolidation proposals on staffing, transport and accommodation

	Consolid. enrolment 1971	Teachers 1971		P:T ratio 1971		Teachers req. 1976		P:T ratio 1976		Teachers for redeployment 1976				Approx. add. pupils for transp.		Addit. class-rooms[1]
										School		CA				
		T	U	School	CA	T	U	School	CA	T	U	T	U	School	CA	
ST	72	4	—	18.0	18.0	3	—	24.0	24.0	1	—	1	—	32	32	1
BM	255	9	2	23.2		8	—	32.2		1	2			87		2
	59	2	1	16.7	22.4	2	—	29.5	31.4	—	1	1	3	24	111	—
TC	76	3	—	25.3		3	—	25.3		—	—			15		—
	134	6	—	22.3		4	—	33.5		2	—			37		—
	90	4	—	22.5		3	—	30.0		1	—			24		—
	133	6	—	22.2	22.8	4	—	33.2	30.9	2	—	5	—	26	102	—
EK	113	3	1	28.3	28.3	3	1	28.3	28.3	—	—	—	—	15	15	—
BS	309	7	—	15.5		4	—	27.2		3	—			90		3
	212	6	1	30.3		6	1	30.3		—	—			27		1
	132	3	2	26.4	23.8	3	1	33.0	30.2	—	1	3	1	27	144	—
GR	65	3	—	21.7		2	—	32.5		1	—			19		—
	56	3	—	18.7		2	—	28.0		1	—			25		—
	134	5	—	26.8	23.2	4	—	33.5	31.9	1	—	3	—	29	73	1
CL	69	3	—	23.0		2	—	34.5		1	—			18		—
	135	6	—	22.5		5	—	27.0		1	—			49		1
	103	4	1	20.6		3	—	34.3		1	1			53		1
	66	3	1	16.5	20.7	2	—	33.0	31.1	1	1	4	2	36	156	—
GT	119	4	1	23.8	23.8	4	—	29.7	29.7	—	1	—	1	29	29	—
	2 132	84	10	22.9		67	3	30.7		17	7	17	7	662	662	10

T = trained, U = untrained, CA = catchment area, P:T = pupil:teacher ratio

1. By regulation a general-purpose room will also be required at each consolidated school, making a total of eighteen for this column.

information the prospects of these schools were examined with the acceptance of the one-teacher school. Projected enrolment to 1981 is shown in Figure 5 on the basis of the enrolment trend 1966-71 and demographic trends.

Thus three further schools, Carney (GR), Knocknarea (ST) and Drimina (TC) will drop below one-teacher school viability in the short term, and Lugnagall, Calry (ST), Keash (BM), Castlerock (TC), Culleens (EK), Ballylig (BS), Derrylahan (GR) and Annaghmore (GT) in the medium term. The number of schools for phasing-out on this basis in the short and medium terms is shown by catchment area in Table 44 and details of the proposals are given in Table 45. Thus thirty-two schools might be closed in the short term or first phase leaving seventy-six, and then a further eight in the medium term leaving sixty-eight schools (including the New Collooney Central).

E. CONSOLIDATION EFFECTS

The effects of these consolidations on recurrent costs are summarized in Table 46 and the main effects on staffing, transport and accommodation in Table 47.

It is seen that better utilization of teachers (pupil/teacher ratio changes from 22.9 to 30.7 for the consolidated schools) reduces teacher cost by £37,656, enabling an additional £16,550 to be spent on transport and still decreasing over-all expenditure by £21,106.

For the consolidated schools, teacher cost as a share of over-all cost drops from 94 to 81 per cent and transport cost allocation increases from 5 to 18 per cent.

The consolidation reduces over-all unit cost per pupil from £58 to £55; there is a substantial decrease for the consolidated schools from £73 to £63.

The provision of some eighteen extra classrooms (including eight general-purpose rooms) may be attributed to the rationalization proposals, involving capital expenditure of between £40,000 and £50,000, depending on the standard of building to be provided. Even if this figure is annuated most conservatively, it must still be well below the annual recurrent saving of over £21,000.

Thus, the second scheme seems more attractive than the first on a cost basis and it apparently provides pedagogical and social improvements.

However, speaking generally for the two schemes proposed, the limitations of the criteria applied must be kept in mind. It is very difficult to decide on the break-even point between better utilization of resources and improved pedagogical and social conditions. Balancing higher average pupil/teacher ratios in rural areas against more travel and better physical facilities for pupils does not take account of all the factors involved in rationalization.

VI. Proposals for the rationalization of the second-level school network

In this chapter, examination of possible schemes for the rationalization of the second-level school network is based on the analysis and diagnosis (Chapter III), on projected second-level enrolment for 1976 (Chapter IV) and on a perspective of economic and social development in the county.

It has been observed that the disparities in the qualitative and quantitative characteristics of the existing educational supply affect the demand and result in unequal educational opportunity between catchment areas. Thus all rationalization proposals must aim to improve the supply in the less favoured catchment areas. However, such proposals must also comply with economic and demographic constraints; they must therefore be of a dynamic nature, capable of allowing for enrolment development on the one hand, and taking account of the existing school network, with its advantages and disadvantages, on the other.

The existing network of schools is the outcome of complex historical, administrative, religious, social and cultural factors, which explains its somewhat irrational pattern. In effect, it is a dual system of public and private schools, lay and religious, with schools varying in enrolment size and offering educational courses more closely related to past traditions than to the accepted objectives of a modern educational system.

For this reason it was considered preferable, in the first section, to examine the possibility of providing an ideal network, disregarding completely the existing pattern and taking account only of the characteristics of potential demand in 1976. In the second section, this ideal network is adjusted to allow for the characteristics of the present network. This leads on to proposals for the amelioration of the network, the effects of which, particularly in terms of costs and accommodation requirements, are examined in a third section.

1. An ideal supply to meet potential demand in 1976

Disregarding the present school network, the main variable to be considered in structuring a supply pattern is the projected enrolment for 1976.

Since the aim to provide equality of educational opportunity is basic to any supply proposal, existing catchment area boundaries which impose constraints must then be disregarded.

It was assumed that all pupils enrolled in first-level grades II to VI in 1971 are the potential enrolment for second-level years 1 to 5 in 1976.[1] Map 8 was drawn on this basis and shows the maximum potential second-level enrolment in 1976 for both the lower and higher stages according to first-level school location.

A. THREE RATIONALIZATION POSSIBILITIES

To meet this demand, at least three supply schemes can be proposed as follows:

1. A network of senior schools of similar size with lower and higher stages offering a complete set of higher-stage alternatives, i.e. language, science, business studies, technical and general (social studies) subject groups,[2] in accordance with official rules and programmes.
2. A network of senior schools of similar size with lower and higher stages offering a number of higher-stage alternatives, ensuring balance of the alternatives between catchment areas.
3. A network of junior schools of similar size with the lower stage only and a balanced distribution, as a base to a smaller number of senior schools of similar size with lower and higher stages offering a range of higher-stage alternatives.

1. Subject to an arbitrary rate of loss

2. *Language*: Irish, English, French, German, Italian, Spanish, Latin, Greek and Hebrew
   Science: mathematics, physics, chemistry, biology and applied mathematics
   Business studies: accounting, commercial organization, economics and history of economics
   Technical: engineering, techniques, drawing, construction, mechanics, physics and chemistry, applied physics, agriculture, economy and domestic economy
   General (social studies): history, geography, art, music, home economics
   At least three compulsory subjects from the group chosen, together with two other subjects

SOURCE: *Rules and programme for secondary schools 1970/71*, Dublin, Stationery Office, pp. 13-7 (mimeo)

B. SUPPLY SCHEME FAVOURED

i. First scheme

The schemes must be compared in the light of the characteristics of the curriculum in order to choose the one which appears best suited to the enrolment conditions of second-level education in the county.

The range and type of curriculum offered depends almost exclusively on the enrolment size of second-level schools. Thus, there is a minimum size appropriate to each of the above schemes. Also, the dispersion of pupils in the county delimits transport possibilities and thus, in turn, delimits the possible enrolment sizes of schools. It is difficult to define minimum size standards, but the task merits suitable research because of its importance in developing a rational network. Because of lack of data, some hypothetical cases were examined, with a weekly curriculum time allocation similar to the national norm to assess the relationship between enrolment size, choice of higher-stage alternatives and time utilization rates for special classrooms (see Chapter X).

TABLE 48. A simple example of enrolments for 1-5 subject-group alternatives

	Classes for 800 enrolment	Alternatives and enrolments				
		5	4	3	2	1
1st Year	10 × 20	200	160	120	80	40
2nd Year	10 × 20	200	160	120	80	40
3rd Year	10 × 20	200	160	120	80	40
4th Year	5 × 20	100	80	60	40	20
5th Year	5 × 20	100	80	60	40	20
Total enrolments		800	640	480	320	160

Table 48 indicates the enrolment size required to offer from one to five higher-stage alternatives; Table 49 gives an example of a curriculum fulfilling the regulations for a school offering five higher-stage alternatives.

Making the following assumptions then, a ten-stream entry or a total enrolment of some 800 is required to offer the full range of five higher-stage alternatives and to give an acceptable utilization of the necessary specialist teachers and accommodation:

1. A continuous five-year course; three years lower and two years higher stage;
2. A co-educational higher-stage school, with enrolment divided equally between boys and girls;
3. A promotion rate of 100 per cent;
4. An admission rate of 50 per cent to the higher stage;
5. Equal choice of the five alternatives offered;
6. Average class size of twenty.

Examination of the potential demand in the various catchment areas given in Map 8 shows clearly that the density of the school-age population throughout the county is too low to support schools supplying all five alternatives, except in Sligo Town. And Map 8, it should be noted, indicates the maximum possible demand for 1976. It was assumed, for the sake of simplicity, that there would be equal choice between the alternatives, whereas in 1971 a large majority took the language group.[1] Thus, a network offering a complete range of alternatives would risk considerable under-utilization of special classrooms due to the low level of over-all demand and an unbalanced choice of subject groups.[2]

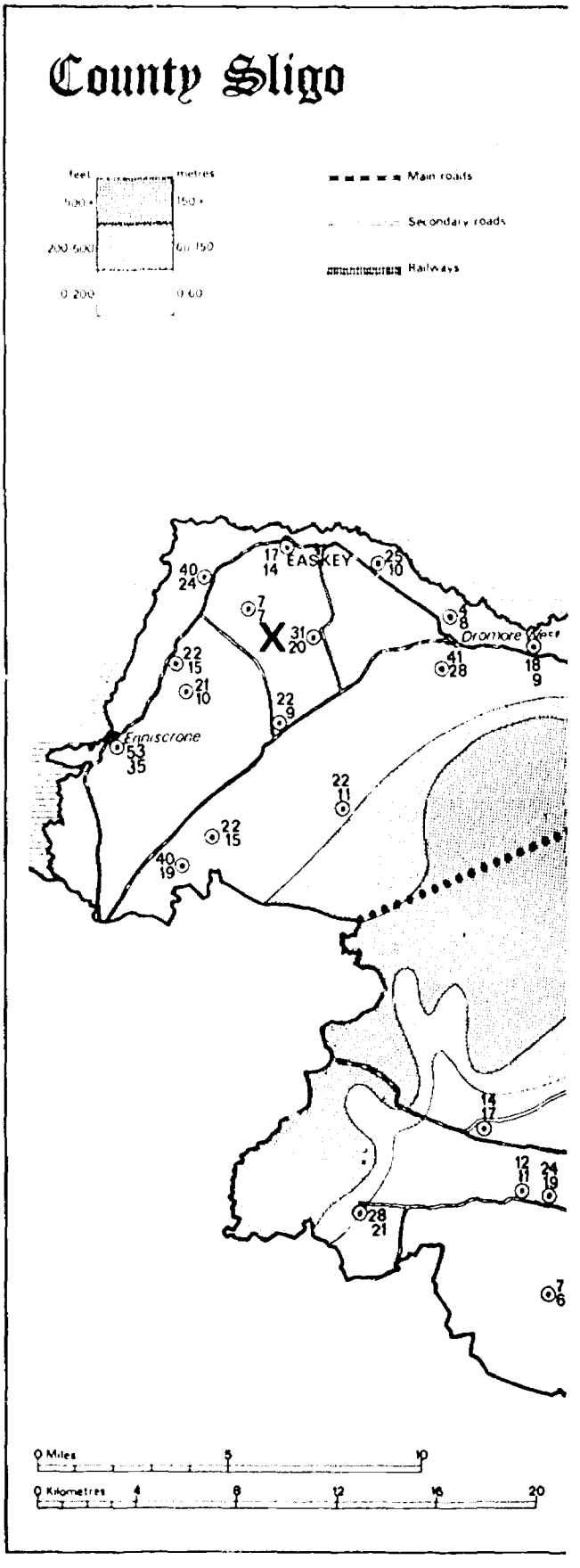
1 Language and general 78 per cent, science 5 per cent, business studies 10 per cent and technical 7 per cent.
2 Not to mention problems of staffing that might arise.

TABLE 49. Example of a curriculum giving five alternatives (hours)

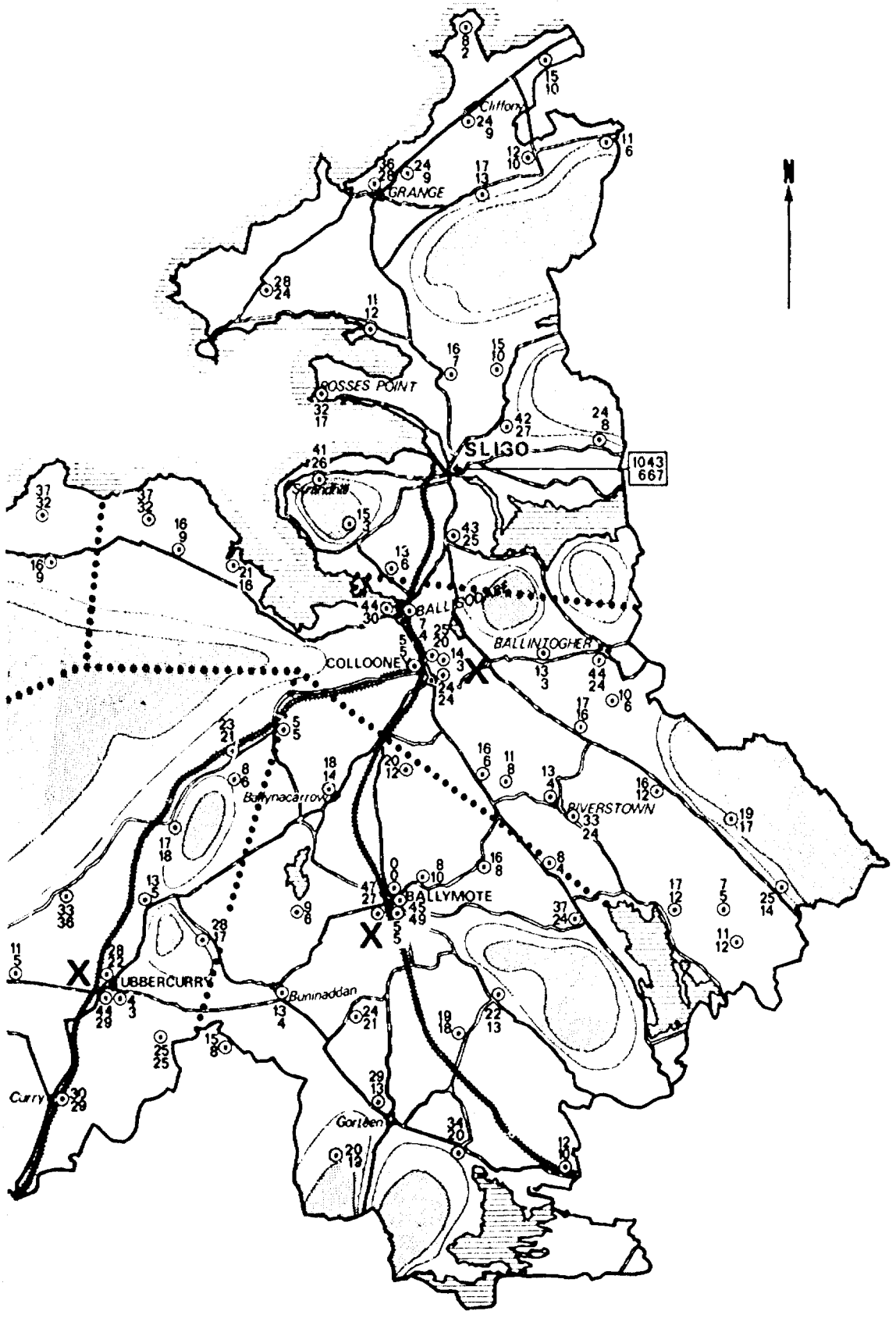
	Lower stage		Higher stage				
	Boys	Girls	Lang	Science	Busn studies	Tech	General (social studies)
General							
Irish	3	3	4½	3	3	3	3
English	3	3	4½	3	3	3	3
Maths.	3	3	4½	4½	3	3	3
Civics	1	1	1	1	1	1	1
Religious instruction	2	2	1	1	1	1	1
Special							
Art/drawing	3	3	—	—	—	3	4
Woodwork/building science	3	—	—	—	—	4½	—
Metalwork/engineering	3	—	—	—	—	4½	—
Science	3	3	—	9	—	3	—
Home economics	—	3	—	—	—	—	4½
Business studies	1½	3	—	—	9	—	1½
Modern languages	2	2	9	3	4½	3	4½
Geography/history	1½	3	4½	4½	4½	—	3
Physical education	1	1	1	1	1	1	1
	30	30	30	30	30	30	30

NOTE It is assumed that arrangements for music and other cultural activities are made outside this curriculum, and are offered as an additional alternative among such activities as games, hobbies, debate, etc.

Map 8. Maximum potential second-level enrolment in 1976 according to first-level school location



NOTE Based on enrolment in first-level grades II–VI of school year 1970/71, i.e. lower stage (potential)—upper figure, higher stage (potential)—lower figure


N
SLIGO
1043
667
ROSSES POINT
GRANGE
Clifford
COLLOONE
BALLINTOGHER
BALLYMOTE
RIVERSTOWN
Ballynacarrow
TUBBERCURRY
Curry
Gorteen
Bunnaddan

ii. Second scheme

One is therefore compelled to discard the first scheme as non-viable and to consider a network of schools offering less than a complete set of alternatives. This means examining the impact of the second scheme proposed (i.e. the provision of two, three or four alternatives) on enrolment size.

The normal minimum size of establishment which could offer three to four alternatives would be 480 to 640 pupils (See Chapter X). Is such a standard compatible with the geographic distribution of demand? It is seen from Map 8 that it is, since catchment areas could be organized to meet this minimum-size standard. The enrolment characteristics of such an organization are as follows:[1]

Catchment areas and enrolment	*Approximate location*
LK-EC (662)	Owenbeg
BS-CL (783)	Collooney
BM-GT (662)	Ballymote
TC (672)	Tubbercurry
ST-GR (2,295)	Sligo Town[2]

For a school network offering only two alternatives, the normal minimum-size standard is 320. For such a scheme, educational supply enrolment characteristics by catchment area would be as follows:

Catchment area	*Enrolment*
EC (catchment area extended up to Cabra)	367
EK (catchment area from Cabra to Beltra)	375
BS (catchment area from Beltra to Riverstown)	364
CL (catchment area from Riverstown to county boundary)	302
GR (catchment area from Drumcliff to county boundary)	301
BM/GT (catchment area unaltered, though combined) (two co-ordinated units each of 331 in Ballymote)	662
TC (identical, but amalgamated catchment area) (two co-ordinated units each of 336 in Tubbercurry)	672

Thus, even if a two-alternative higher-stage school scheme were adopted, based on the maximum potential demand figures, these schools would still not be justifiable in the CL, GR and Benada areas. Briefly, this scheme is not only restrictive in provision, but also hardly geographically feasible.

With regard to Sligo Town, there are two major organizational possibilities to meet the demand from 2,295 pupils:

1. Three large schools each independently providing the full range of five alternatives;
2. Five medium-sized schools sharing the alternatives in such a way as to provide a certain degree of flexibility in adapting supply to demand.

iii. Third scheme

The third scheme for a county network seems unattractive for both pedagogical and economic reasons, since it would merely perpetuate the existing system which has been seen to lead to inequalities and disadvantages for pupils in some catchment areas, especially those where higher-stage courses are not available and whose schools, despite the best intentions, tend to become less prestigious. Pupils from catchment areas such as GR, CL and GT, which must form a lower echelon in this proposal, would certainly be disadvantaged by comparison with those from other catchment areas having senior multiple-alternative schools. Even if the demographic features of the county were such as to make the scheme acceptable, it would still not be a good long-term solution since it would not fulfil the equality of educational opportunity objective. But the population distribution is such throughout the county that a double echelon scheme of lower-stage and full-course schools would cause time utilization rates of special classrooms to be as low as 50 per cent in some cases, and space utilization rates would also be low.[3] Indeed, on the basis of the present recommended curriculum and accommodation standards, it is unlikely that acceptable time and space utilization rates for special classrooms would be achieved in schools below 400 in enrolment.

Similarly, the problem of making full use of the skills of specialist teachers can be solved only in schools of this size, since sharing these teachers between dispersed schools causes further organizational problems.

This argument leads to the suggestion that because of demographic, pedagogical, economic and geographical factors, catchment areas (other than ST) should be organized to provide a minimum enrolment of some 400 pupils at one education centre within each area. This, in effect, means the adoption of the second scheme and would involve reorganizing existing catchment areas.

Finally, of the three supply schemes envisaged, only the second one appears suited to the actual conditions in the county, namely a scheme that will provide a network of senior schools each offering from two to five higher-stage alternatives, depending on the catchment area involved. How far can these conclusions be adopted and what changes in the network of existing schools do they imply? This is examined in the following section.

2. A proposed supply system taking account of the existing network

A. CRITERIA

The proposals have been prepared within the framework of the national second-level school network policy, summarized in Chapter III, p. 26.

The following criteria were also laid down:

1. A more comprehensive curriculum will be provided, blending academic and practical subjects, and offering a minimum of three higher-stage alternatives at each school.

1 These theoretical proposals approximately match the centres of gravity of the new catchment areas

2 The small lower-stage school in GR (Grange, ten miles from Sligo Town) would thus be phased out so that pupils from this area could avail themselves of the wider range of alternatives offered in Sligo Town

3 See Chapter X

2. It will be aimed initially at achieving at least 25 per cent 'science' and 25 per cent 'business studies' and 'technical' subject group alternatives for the county.
3. Schools will be located at points which appear to be 'poles of growth'.
4. To phase the rationalization taking account of existing site accommodation and educational facilities, together with existing possibilities and obstacles arising from the concrete implementation of the proposals. Among other things, total daily travel time should not exceed ninety minutes for any pupil.
5. As far as possible, locate schools as close as possible to the community centres in towns, in order to enable maximum utilization of school and community facilities, such as classrooms, libraries, playgrounds, museums, or other educational, cultural and sporting facilities.

B. THE NETWORK IN 1971

The main weaknesses of the present network (see Chapter III, p. 26), may be summarized as follows:

1. Of eleven schools outside Sligo Town, four are too small even to offer a single higher-stage alternative, while the other seven can hardly provide two. Thus, these eleven schools individually are incapable of development to the standard set in this study for second-level schools.
2. The accommodation problem is fairly serious, with temporary or rented accommodation being used by almost one-fifth of the pupils; half of the science laboratories, workshops and home economics' rooms are obsolete, and language, library and gymnasium facilities are meagre. The problem is particularly serious in the small county schools.
3. Generally, there is at present over-emphasis on the language rather than the science and technical subject groups.

C. THE RATIONALIZATION PROPOSALS

The approach to rationalization proposals is one of compromise between:

1. The 'ideal' scheme for County Sligo conditions, selected earlier in the chapter to provide a balanced network offering three to four higher-stage alternatives.
2. The present network slightly modified to take account of the increase in educational demand by 1976 and of assumptions made with regard to the choice of higher-stage alternatives.

The proposals emerge from the confrontation of Map 3 (p. 28), describing the 1971 school network and Map 8 (p. 70) which gives the 1976 potential demand by first-level school location. This involves a reorganization of catchment areas and a centralization of schools, and may be outlined as follows:

i. Combination of EK and EC catchment areas

The maximum potential demand for 1976 is 662 (410 in EK and 252 in EC) compared with an enrolment projection of 550. The enrolment 'centre of gravity' lies at Owenbeg, a rural area; the village nearest this point is Easkey (EK).

The location of the school in Easkey could also be justified for the following reasons:

1. The EK catchment area has the larger potential demand;
2. Enniscrone (the only other alternative) is situated close to Ballina (nine miles away), a major town in the neighbouring county;
3. School extension possibilities are excellent at the Easkey school site, whereas expansion might be problematic in Enniscrone;
4. Location at Easkey might stimulate the development of this village.

ii. Combination of BS and CL catchment areas

The maximum potential demand for 1976 is 783 (351 for BS and 432 for CL), as compared with an enrolment projection of 557. The enrolment 'centre of gravity' falls close to the town of Collooney.

Location of the school at Collooney may also be justified for the following reasons:

1. Collooney is an important industrial town with further industrial development prospects (see Map 6, p. 45).
2. Collooney is situated two miles from Ballisodare and under the stimulus of industrial growth in the former, a combined Collooney-Ballisodare urban area might develop as a growth centre, i.e. a counterbalance to Sligo Town.
3. The Ballisodare school has a site expansion problem and its classroom accommodation position is also serious.
4. Locating a large central school in Collooney might curtail the heavy flow of pupils from the BS-CL catchment areas towards ST (in 1971, 117 pupils from BS-CL at ST schools).

iii. Combination of BM and GT catchment areas

The maximum potential demand for 1976 is 662 (560 in BM and 202 in GT), compared to an enrolment projection of 527.

It is not necessary to elaborate on the reasons for adopting Ballymote as the location for the school; a mere glance at the map clearly illustrates that Ballymote should be the centre.

iv. Centralization in TC

The maximum potential demand for 1976 is 672 (420 in Tubbercurry and 242 in Benada), compared with an enrolment projection of 531. The enrolment 'centre of gravity' is at Tubbercurry and the Benada school should also be centralized here for the following reasons:

1. Tubbercurry is a major industrial development centre in the county, with further industrial growth prospects, whereas Benada forms part of a rural area with a declining population.
2. As Table 50 shows, there is much irrational movement of pupils from Tubbercurry to Benada, a rural school four miles distant from the town.

Finally, land is available for educational development in the vicinity of the two existing second-level schools in Tubbercurry and there are, accordingly, excellent prospects for providing a broad range of alternatives.

TABLE 50. Pupil movement between TC and Benada, 1971

	Benada				Marist				TC Voc Sch				Total				
	Lower		Higher		Lower		Higher		Lower		Higher		Lower		Higher		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Benada						3			17	5	2	1	17	8	2	1	28
Marist Conv.																	
TC Voc. Sch	57	7	16	11									57	7	16	11	91
BM	1					3			1				2	3			5
GT	1	1				4		3	1				2	5		3	10
Other	3	2	3	1							2		3	2	5	1	11
	60	10	19	12		10		3	19	5	4	1	81	25	23	16	145

	Lower		Higher		Lower		Higher		Lower		Higher		Lower		Higher	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Benada	17	8	2	1			62	10	19	12	+45	+2	+17	+11	+62	+13
Marist Conv.								10		3		+10		+3		+13
TC Voc. Sch	57	7	16	11			19	5	4	1	38	2	12	10	50	12

v. Combination of ST and GR catchment areas

The maximum potential demand for 1976 is 2,295 (1,994 in ST and 301 in GR), compared to an enrolment projection of 2,017.

The five schools in Sligo Town could expand to absorb the pupils from GR and offer a comprehensive and varied range of alternatives, perhaps along the following lines:

1. The Ursuline Girls' School could offer the three higher-stage alternatives of language, science and general.
2. The Mercy Girls' School could specialize in language, science and business studies.
3. The Summerhill Boys' School could offer language, science, business studies and general (social studies), or technical.
4. The Vocational School (mixed) could provide four alternatives (language, science, business studies, technical).
5. The Grammar School, a mixed school, could offer two alternatives.

TABLE 51. Classroom requirements and time utilization rates (TUR) for 480–640 enrolment schools giving three alternatives (languages, science and technical)[1]

Subject	Classroom utilization in hours					Class-rooms reqd	TUR%	Classroom
	Lower Stage	Higher stage			Total			
		Lang	Science	Tech				
General								
Irish	72	18	6	6	102		95	General
English	72	18	6	6	102		95	General
Maths.	72	18	9	6	105	14	95	General
Civics	24	4	2	2	32		95	General
Religious instruction	48	4	2	2	56		95	General
Special								
Art/drawing	72			6	78	3	87	Art
Woodwork/building	36			9	45	2	75	Workshop
Metal-work/engin.	36			9	45	2	75	Workshop
Science	72		18	6	96	4	80	Laboratory
Home economics	36				36	2	60	Home econ. room
Business studies	54				54	2	90	Commerce room
Modern languages	48	36	6	6	96	3	100[2]	Language lab.
Geog./history	54	18	9		81		90	Geography room
Physical educ.	24	4	2	2	32	2	53[3]	Gymnasium
	720	120	60	60	960	34	94	

1 *Assumptions*
(i) Co-educational senior school, M:F = 1:1.
(ii) eight-stream entry, twenty-four classes lower stage, eight classes higher stage.
(iii) promotion rate lower stage 100%, higher-stage retention rate 50%.
(iv) class size twenty (average).
(v) higher-stage alternatives: language, 50 per cent (four classes), science, 25 per cent (two classes), technical, 25 per cent (two classes)
2 Some modern language lessons might be taken in general rooms reducing TUR percentage in the language laboratory and increasing it somewhat in the general rooms
3 A gymnasium each for boys and girls would be available and these would also be used as assembly and meeting rooms, e.g. for debates, films, etc
NOTE (i) Library, music, career guidance, etc., would be added.
(ii) With an average class size of twenty the space utilization rate (SUR) would be acceptable
(iii) See Chapter X (p. 94) for other details

The proposed rationalized second-level school network is shown in Map 9.[1] It may be observed that this network would provide the full range of alternatives, balance their distribution and gear their availability to increase the importance of the science and technical subject-groups, so that some 25 per cent of pupils could join these groups as against less than 10 per cent at present. In Table 51 it is seen that good time and space utilization rates for specialist classrooms are possible in three-alternative schools.

3. The effects of the proposals

Implementation of the proposals implies three major effects, as follows:

1. Additional school transport provision;
2. Increased utilization rates for classrooms and equipment, together with increased pupil/teacher ratios;
3. Acquisition of land, provision of additional accommodation, renovation of existing buildings and provision of additional equipment.

The effects on annual recurrent teacher and transport costs are summarized in Table 52;[2] other effects are shown in Table 53.

Thus an annual saving of some £20,000 may be effected through better utilization of teachers (pupil/teacher ratio changes from 17.4 to 18.2) reducing the unit teacher cost from £99 to £94 per pupil; there is relatively little change in transport costs.

It is difficult to assess the additional accommodation which might be directly attributable to implementing the rationalization proposals, since a costly modernization element, which is not easy to apportion, automatically goes with new buildings. However, from a comparison of the present extension plans of the school authorities with the accommodation required by the consolidation proposals, it would seem that the latter would warrant, at the most, some fifteen additional classrooms over and above the former plans. Including the purchase of land, a total capital expenditure of £120,000 is a reasonable sum to attribute directly to the implementation of the rationalization proposals, especially since the value of abandoned buildings has not been taken into account.

Even annuating this capital sum conservatively and comparing it with the £20,000 to be saved annually on recurrent costs, the proposed consolidation is viable on economic grounds. This being so, the pedagogical and social advantages to be gained, such as the modernization of the reformed curriculum, provision of a wider subject

TABLE 52. Effects of proposed consolidation on some annual recurrent costs[1] (in £ Sterling, 1971 prices)

	Teachers		Transport	
	Cost	Per pupil	Cost	Per pupil
1971	396 355	99	47 574	12
1976 (proposal)	375 684	94	49 464	12
Change	−20 671		+1 890	

1. Average annual salary for private school teachers of £1,600 is used.

1. The use which might be made of the phased-out schools was not studied but there are possibilities for use as first-level schools, community centres, adult and agricultural education centres.
2. Other recurrent costs are excluded for lack of data, but it is reasonable to assume that these costs would not increase because of consolidation and in any case teacher and transport costs comprise the major proportion of recurrent costs.

TABLE 53. Possible consolidation effect on staffing and transport[1]

School	Enrolment 1971	F/T equiv. teachers 1971	P/T ratio 1971	Enrolm. with consolid.	Teachers reqd. with consolid.	P/T ratio after consolid.	Saving of teachers	Additional pupils for transport
ST								
ST schools	2 079	111.0	18.7	2 194	118.5	18.5	—	+19[2]
GR	115	7.7	14.9					
BM								
Mercy Conv.	167	9.0	18.6	463	25.4	18.2	5.8	+26[2]
Voc. School	178	12.2	14.5					
GT	118	10.0	11.8					
TC								
Marist Conv.	235	15.0	15.7	630	34.6	18.2	1.9	−50(est)
Voc. School	130	9.5	13.8					
Benada	265	12.0	22.1					
EK-EC								
EC	197	12.5	15.7					
EK	194	13.6	14.3	391	21.5	18.2	4.6	+50
BS-CL								
BS	186	7.0	26.6	329	18.1	18.2	—	+25[3]
CL	143	10.6	13.5					

1. 1971 figures for comparison.
2. These pupils will become eligible for free school transport in this arrangement.
3. Pupil-teacher ratio at BS is actually above the norm.

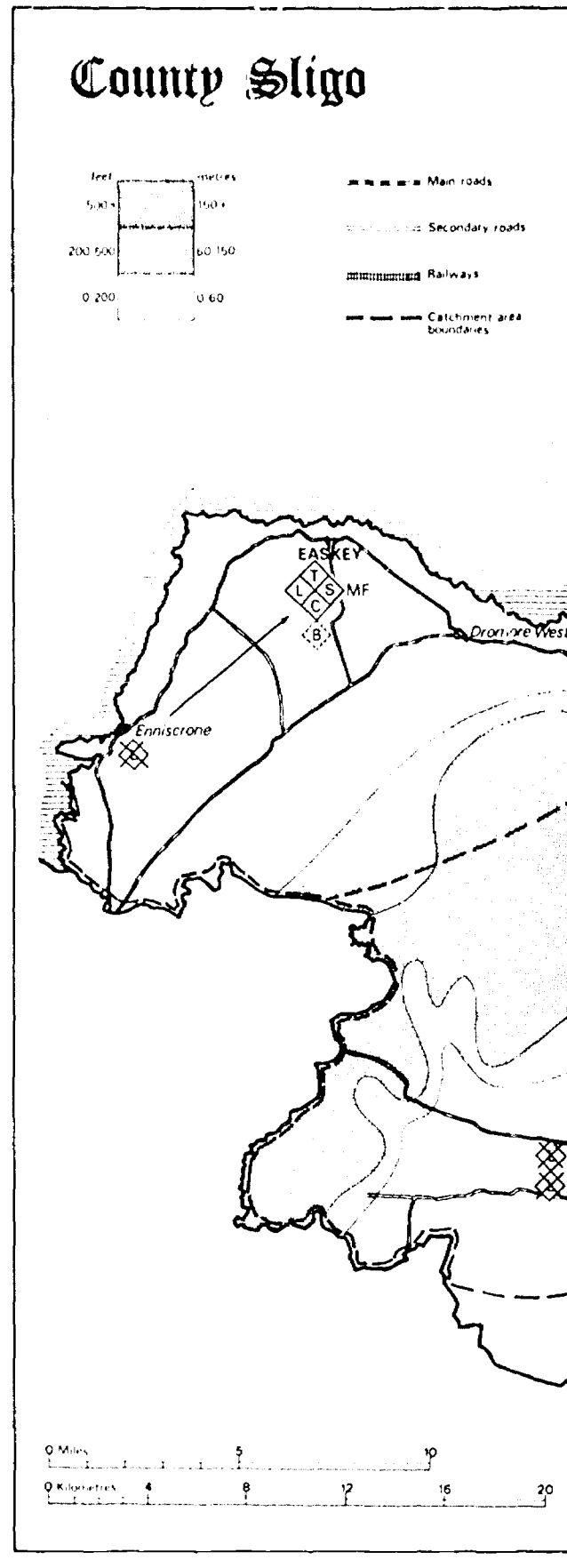
Map 9. Rationalized second-level school network, 1976

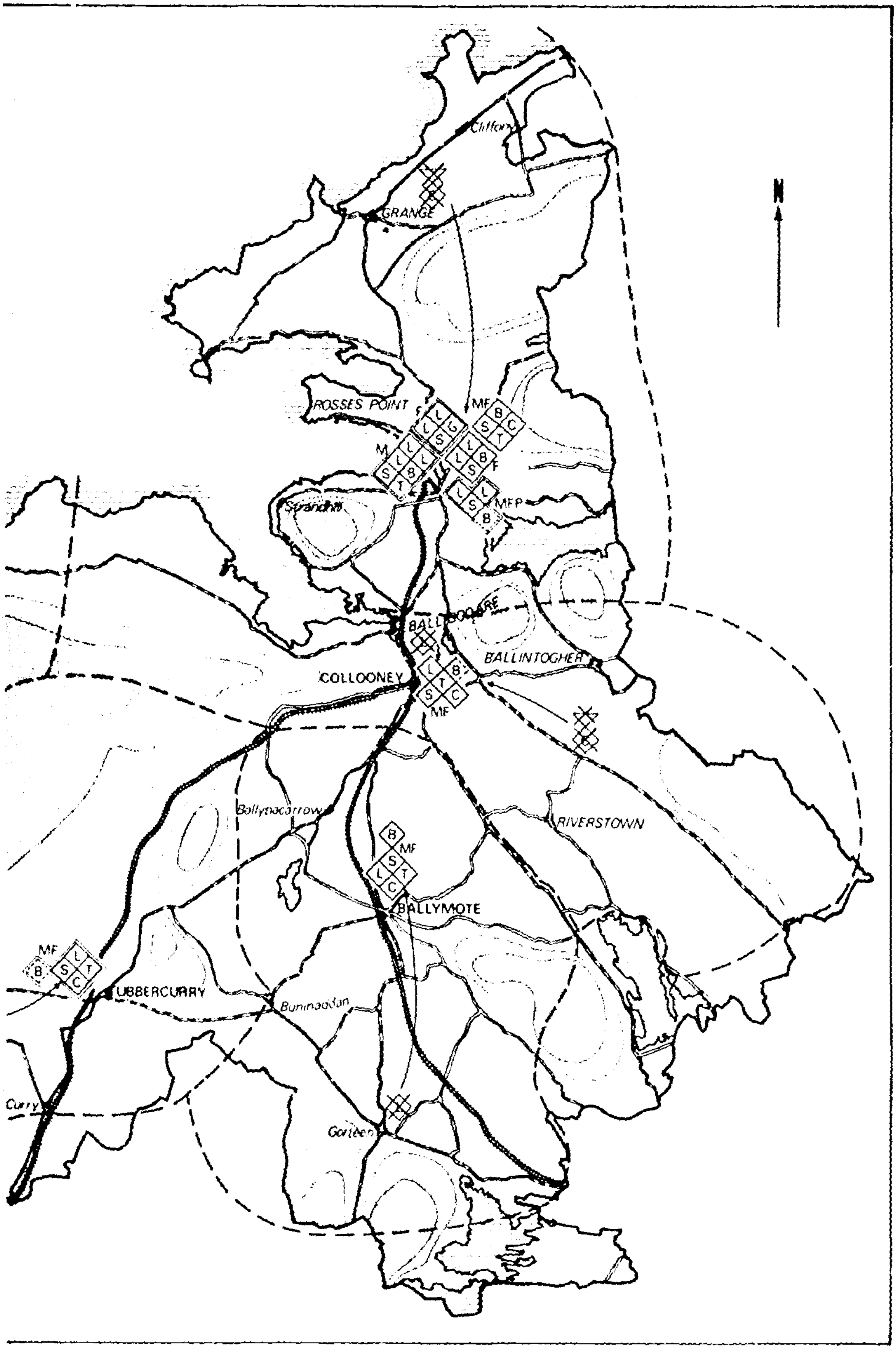
Junior centre

Higher-stage alternatives

- Languages
- Science
- Business studies
- Technical
- General (social studies)
- Commercial training
- Potential alternative
- Boarding
- School phased out

P — Protestant





Cliffony
GRANGE
N
ROSSES POINT
Strandhill
BALLINTOGHER
COLLOONEY
Ballynacarrow
RIVERSTOWN
BALLYMOTE
TUBBERCURRY
Bunnanadan
Curry
Gorteen

choice for pupils and the contribution towards equalizing educational opportunity, make the rationalization proposals acceptable.

An outline of the present extension plans and how they might affect the consolidation scheme is given in the following sections.

A. FOR EK-EC

The EK and EC authorities have schemes for extending their schools: six classrooms or 150 places in EK, and five classrooms and 125 places in EC. In EK, ten acres of adjacent land was recently acquired to implement this plan.

If plans were made to provide this additional accommodation on the EK site, the desired range of higher-stage alternatives could be provided and economies could be achieved. Provision of accommodation should be planned to allow for the participation of the EC religious order and for the proposed new first-level central school at Easkey (see Table 37).

B. FOR BS-CL

The BS authorities, whose school is on a cramped site with little scope for extension and a serious accommodation shortage, have not articulated development plans; a nine-room extension is probably required. In CL, however, a nine-classroom extension or 225 places is planned.

The cost of acquiring land at Collooney and building a new central school of some 450 places for the combined BS-CL catchment areas would probably be less costly than the provision of these separate extensions at the other two schools.

Decisions on the location of this new central school should be made in the light of the proposals for first-level consolidation at Collooney (see Table 37), and of the physical and industrial development plans for the town.

C. FOR BM-GT

There are existing plans for the following extensions: five classrooms at the Mercy Convent, nine at the BM Vocational School and two at Gorteen school.

Centralizing educational facilities on one site at Ballymote would probably involve lower costs than proceeding with separate extensions. The additional accommodation might be located on the excellent and spacious site separating the two Ballymote schools, thus also overcoming the serious site problem of one of these schools.

D. FOR TC

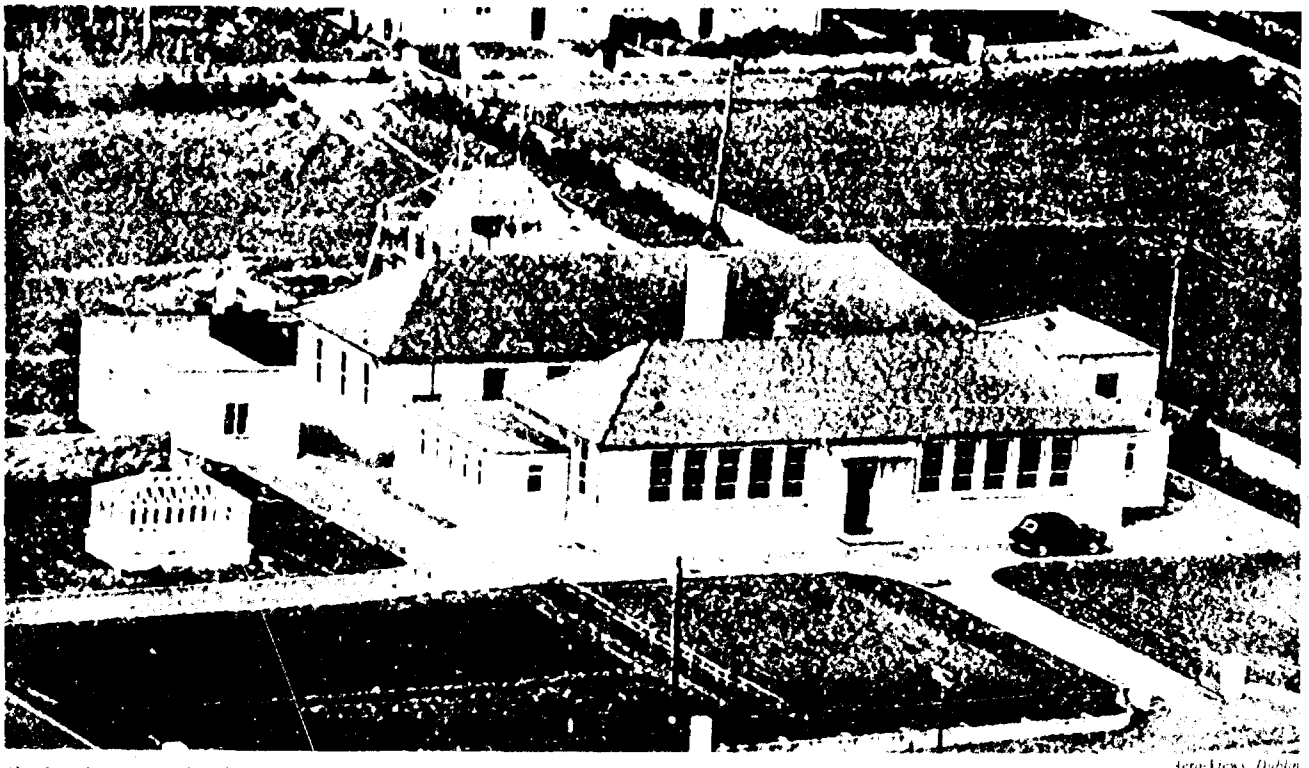
In Tubbercurry a new fourteen-classroom school is planned for construction on a ten-acre site close to the second school in the town, Marist Girls' School, whose authorities also have plans for a three-room extension. Extension plans for Benada have not been articulated.

Cost savings could be achieved by centralizing at Tubbercurry and providing a range of facilities between the Marist Convent and the Vocational School, rather than a separate extension at Benada.

E. FOR ST-GR

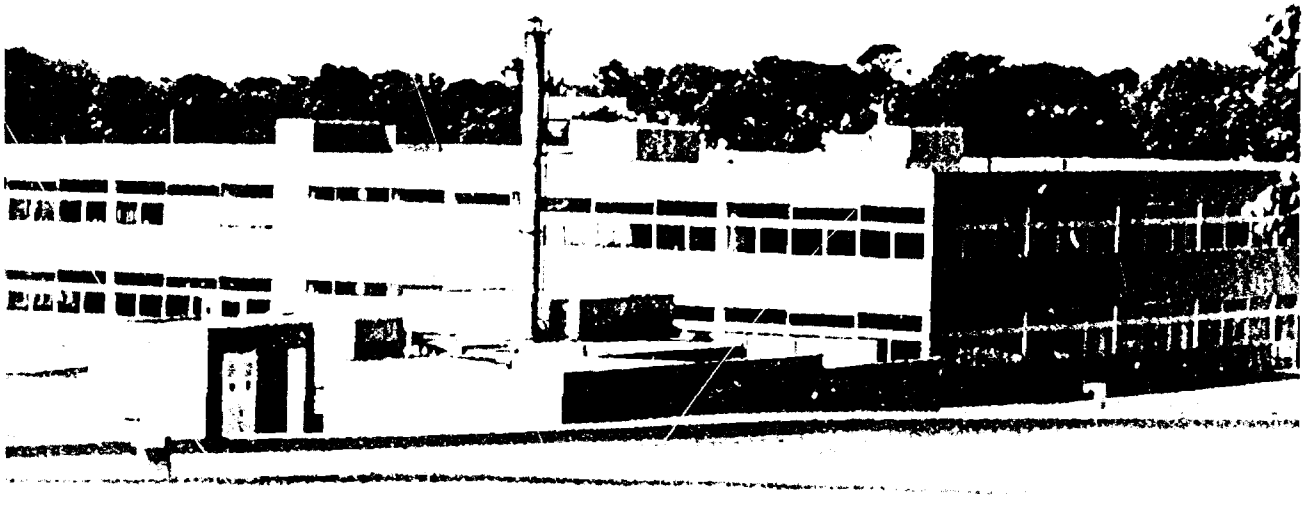
In Sligo Town, a new school of 550 places (346 enrolments in 1971) has just been completed; major extensions have been built at Summerhill College, which now has 800 places (684 pupils enrolled) and replacement buildings have been started at the Mercy Convent and the Grammar School. The Ursuline Convent has some 500 places for a 442 enrolment in 1971.

Accordingly, GR pupils could be accommodated in Sligo Town schools without further extension of the existing facilities.

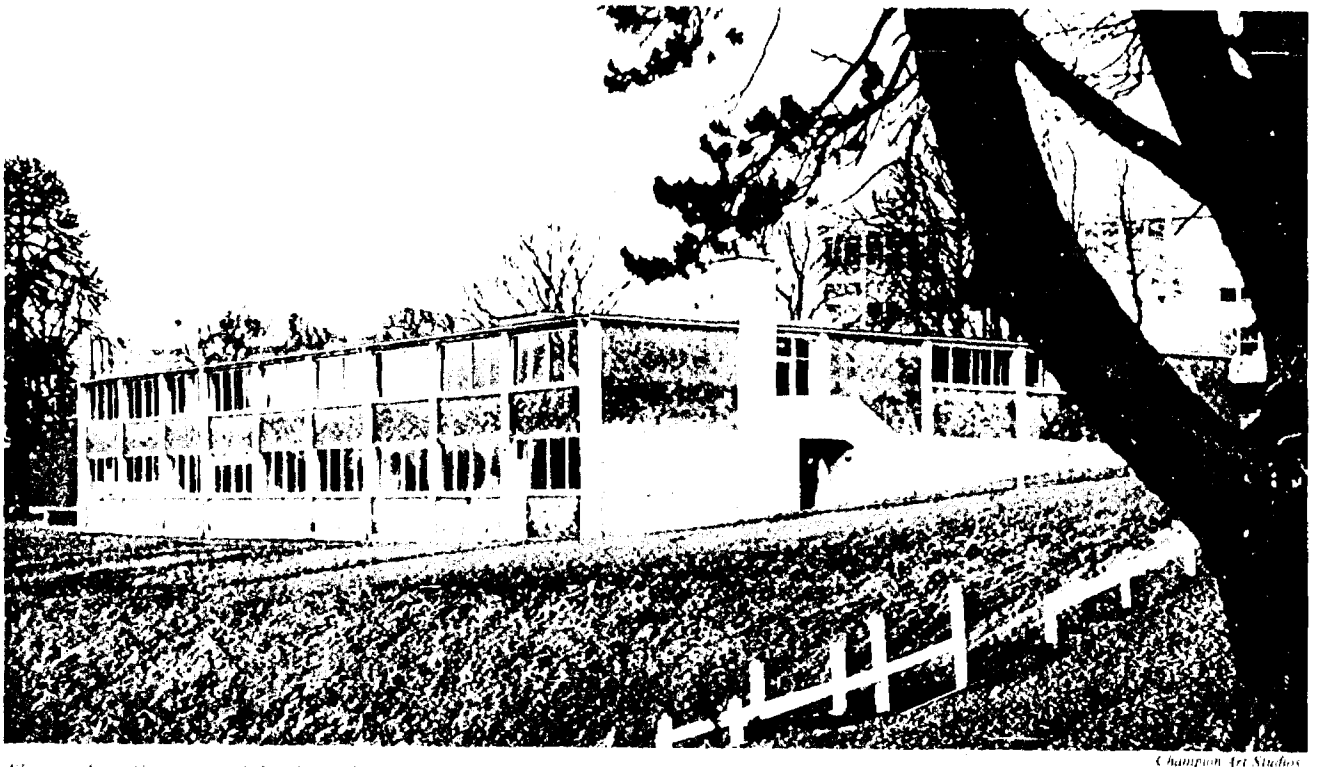


Aero-Views, Dublin

Easkey Vocational School: an example of the piecemeal extension practised in the past.

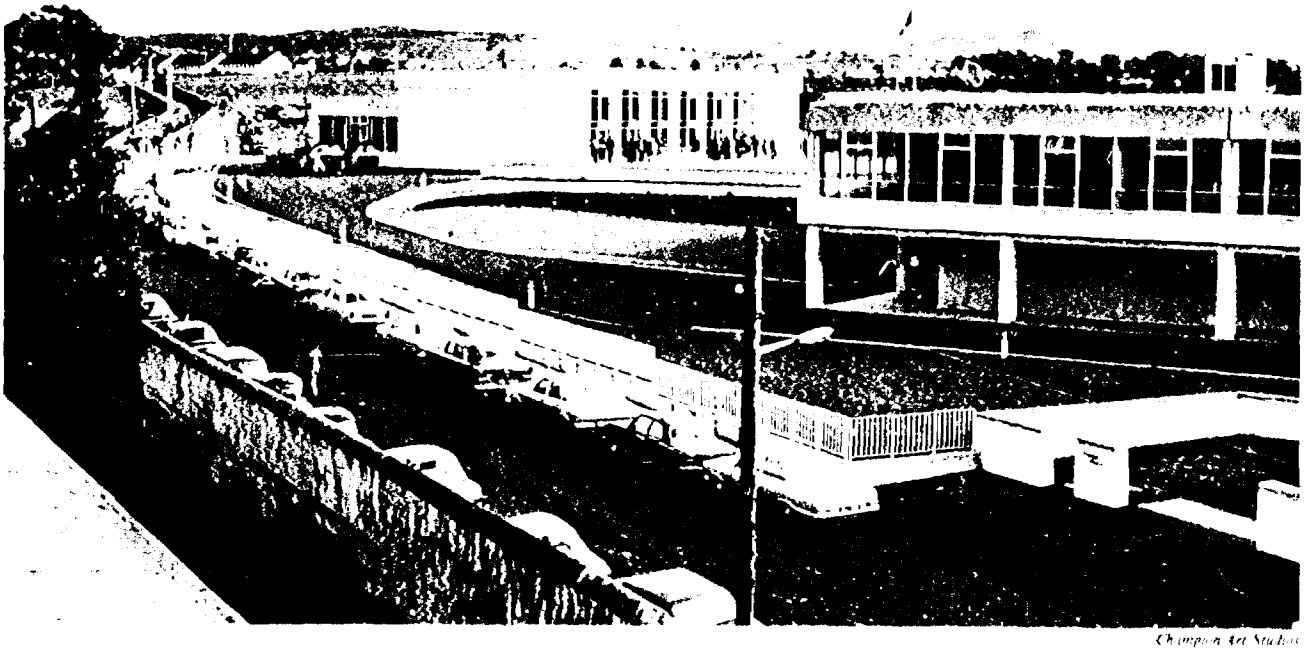


Sligo Town Vocational School: with adequate facilities for modern comprehensive education



Champion Art Studios

The modern Grammar School in Sligo Town.



Champion Art Studios

Summerhill College: a large school offering a modern comprehensive curriculum on a campus with expansion potential.

VII. General conclusions

There were three distinct stages in studying the rationalization of the school networks for the first and second levels:
a) critical analysis of the networks (Chapters II and III);
b) projection of enrolment (Chapter IV);
c) improvement of education supply structures (Chapters V and VI).
It is appropriate to arrange the conclusions reached under these three headings.

A. ANALYSIS OF THE NETWORKS

While some of the conclusions which emerge are highly specific to the enrolment conditions in County Sligo, most of them reflect the situation throughout Ireland and indeed in quite a number of countries. These main conclusions are:

1. The existence at a national level of regulations governing the operating standards of schools is no indication of the extent to which these are fulfilled. Out of 107 first-level schools in the county, seventy-six did not satisfy the national standards. The network of second-level schools also fell short of fulfilling the regulations made by the authorities. Over-all, the present structure of both school networks is largely responsible for the widespread existence of such disadvantageous conditions as sub-standard premises, poor maintenance, under-utilization of accommodation, over-crowding in some instances and inefficient staff utilization.
2. If this over-all picture seems dark, it must be mentioned that there is a range of supply conditions; some pupils have excellent provision, while opportunities for others are limited. There is a correlation between the geographical location of a pupil's home and the standard of supply he is likely to have. Thus, the pupil in Sligo Town is better off in terms of the standard of accommodation, teaching equipment, availability of qualified teachers and of higher-stage alternatives in the second level, than the pupil from a farm twenty-five miles to the south-east. Generally, availability of school transport is not the key factor in the inequalities which exist, although remoteness is a problem in some cases. An indication of inequalities is that enrolment rates for 17- to 18-year-olds vary from 8 per cent (CT) up to 73 per cent (ST). The inequality of the educational supply is the decisive characteristic of the first- and second-level school networks.
3. This inequality is not at random, but the outcome of historical, economic and social factors. Areas which have flourished to a certain degree in the past, but which are today in decline, still have schools more appropriate to past levels of population.

   In this respect, the population trend in the various catchment areas of the county is the factor most closely aligned with the inequality of supply. The decline in some areas and growth in others results in under-utilization of school premises in some cases and over-utilization in others. For instance, in one school in Tubbercurry there is a space utilization rate of 143 per cent, while at the same time 40 per cent of the pupils from this town commute daily to Benada, a rural school some four miles out of town. This situation continues while the population of Benada is dwindling and that of Tubbercurry is growing.
4. The structure of the school system, the regulations concerning age of entry, the duration of compulsory schooling and the methods of selection clearly influence the organization of educational supply and have distinct repercussions on the school network characteristics.
5. The pattern of religious and historical traditions and their effects on the distribution of powers of administration and management at the local level, which, in many respects, is quite reasonable, also make a significant contribution to the coherency of the school networks.

B. PROJECTION OF ENROLMENT

The following observations apply to the effective demand for education:

1. The level of total enrolment governs the pattern of the total volume of the supply. In other words, social pressure to extend the period of schooling results in the growth of the network of schools and, in the short term, often leads to imbalance between the requirements and the actual availability of accommodation; this shortcoming can be gradually and effectively changed through the school mapping approach.

2. It is probable (though not shown in this study) that, in the medium and long terms, the social demand for certain types of education influences the supply structure. That is to say, should the pressure of demand lean more towards literary rather than scientific education, the supply will come to reflect this demand.
3. However, what seems most worthy of note from this study is that, in the short term, it is not the social demand for a particular type of education that appears to determine the supply but, on the contrary, it is invariably the supply which determines the effective demand. In other words, the development of the school system depends essentially on the structure of the supply and its inherent characteristics. As the study of first-level enrolment rates and second-level participation rates shows, parents and pupils often have no real choice; they follow certain courses in accordance with alternatives available at their schools. It requires very special effort for a pupil to pursue studies of his own choosing when, to do so, he must change his home or make long journeys to the school which suits him. If this conclusion is confirmed, it would lead to some improvement in educational planning techniques.

With this in mind, the projection of demand up to 1976 (Chapter IV) was confined to quantitative aspects. This also follows from the conclusion that, in the medium term, demand is predetermined by the existing supply.

C. IMPROVEMENT OF THE SUPPLY STRUCTURE

The proposals for improving the school networks were made with reference to objectives generally implicit or explicit in any modern education supply policy, namely:
1. the provision of equality of educational opportunity;
2. the provision of an education suitable to the aptitudes of pupils.

Now, if one accepts the conclusions in the previous section (*B*), it is obvious that these objectives are not necessarily feasible, either financially or otherwise, or even compatible with other conventional objectives adopted for educational planning, such as:
1. the provision of the manpower needs of the economy;
2. raising quantitative and qualitative standards;
3. the search for economic efficiency;
4. taking account of social demands for education.

For example, if the priority objective after the period of compulsory schooling were that of meeting manpower requirements rather than the provision of equality of educational opportunity, then the inflexibility of the supply would hinder free access for pupils to all disciplines.

Finally, it is appropriate, harking back to one of the aims of this case study, to ask whether it is feasible to prepare an adaptable model for school mapping preparation in the light of the experience of this exercise. In this regard, the framework for a 'relations model' is discussed in the next chapter; whether a useful mathematical model can be prepared remains to be seen.

However, it can be said, in the light of the experience of the study, that the school map *per se* has a propensity for practical application as follows:
1. To act as an instrument for the implementation of the educational plan;
2. As a means for universal application of national norms (e.g. minimum school size, etc.) and for planning the geographical location of schools;
3. As a basis for regional demographic analysis, the *sine qua non* for precise educational planning;
4. For programming rationalization of the school network, in the fields of economic (e.g. optimization), social (e.g. introduction of a transport scheme) and pedagogical (e.g. curriculum, teacher reforms).
5. To aid in setting an order of priorities for the provision of accommodation;
6. To incorporate educational planning in regional, economic and social development plans, in physical planning and in integrated planning generally;
7. To stimulate regional participation in educational planning (i.e. to decentralize educational planning) and thus aid refinement and implementation.

In conclusion it must be said that this report contains weaknesses usually associated with pilot studies; there is an over-emphasis in some instances due to its didactic purpose and an under-emphasis in others because of lack of data.

A more thorough cost analysis was desired, whereby the real costs of boarding, canteen service and travel might be isolated, but it was found to be impossible for lack of data. More detailed data on the origin of pupils would have enabled more illustrative presentation of the rationalization proposals. Likewise, more profound consideration on the provision of higher-stage alternatives in the light of regional development plans and manpower requirements was curtailed. Time and financial constraints also caused the assessment of other possible rationalization schemes, such as satellite school networks, to be excluded.

However, from this first pilot study, guidelines emerge which will be helpful for other more advanced studies. It is obvious, too, that further study is warranted on the role and relationship of education in regional development. Further research must also be undertaken on the obstacles to implementation of educational plans, on the influence of administrative control and on the utility of systems of communication.

PART THREE

VIII. Methodology

1. Data and information

A. GENERAL

The sources of information used in this study included relevant publications (see Bibliography), completed questionnaires, interviews and collected unpublished data.

B. QUESTIONNAIRES

Questionnaires for the first and second levels, including explanatory instructions, were prepared to elicit relevant data for each school in County Sligo. They were framed to yield information under the following main headings: (a) physical facilities; (b) enrolment trend and age-distribution; (c) school transport; (d) teaching staff; (e) recurrent expenditure and financing;

The questionnaire on *physical facilities*, as used for first- and second-level schools, is shown in Form I.

FORM I. School questionnaire on physical facilities

A. GENERAL

Name of school .....
Ownership .....
Year built .... Extended .... Renovated .....
Grounds (in acres) .....
Total classrooms .....
Total pupil-places .....
Total classes .....
Total teachers (full-time equivalent) .....
School session (in days) .....
Rooms rented 1970/71 .....
Building in progress (no. of rooms) .....
Number of pupil-places .....
Ready for use .....

[ ] Day
[ ] Boarding
[ ] Girls only
[ ] Boys only
[ ] Co-education

[ ] Public
[ ] Private
[ ] Catholic
[ ] Protestant
[ ] Non-denom.
[ ] Other

Enrolment
1966/67 .....
1967/68 .....
1968/69 .....
1969/70 .....
1970/71 .....

Building extension possible? Yes/No
Adjoining land acquisition possible? Yes/No
Other land acquisition possible? Yes/No

B. TEACHING AREA (Modern, adequate or obsolete)

General		Special			Gym/gen. purp.		Library		Swimming pool	
Trad.	Pre-fab.	Sci. lab.	Workshop	Lang. lab.	Trad.	Pre-fab.	Trad.	Pre-fab.	Indoor	Outdoor
M	M	M	M	M	M	M	M	M	M	M .....
A	A	A	A	A	A	A	A	A	A	A .....
O	O	O	O	O	O	O	O	O	O	O .....

FORM 1 (*continued*)

C TEACHING EQUIPMENT

☐ Closed-circuit TV	☐ Cine projector	☐ Tape recorder	☐ Library (no. of vols.) .....
☐ TV	☐ Overhead projector	☐ Record player	☐ Public library .....
☐ Radio	☐ Strip projector	☐ Other	☐ Other .....

D ANCILLARY AREA

	Number	Dimensions (ft)[1]		Number	Dimensions (ft)
Administration			*Pupils*		
Headmaster's room	.....	..... ×	Reception	.....	..... × .....
Vice-head's room	.....	..... ×	Shop	.....	..... × .....
Secretary	.....	..... ×	Canteen	.....	..... × .....
Medical	.....	..... ×	Cloakroom	.....	..... × .....
Other	.....	..... ×			
			Maintenance		
Staff			Caretaker's room	.....	..... × .....
Rest room(s)	.....	..... ×	Storage	.....	..... × .....
Cloakroom	.....	..... ×	Boiler room	.....	..... × .....
Sanitary					
Staff	.....	..... ×			
Pupils	.....	..... ×			

E SERVICES

Water	*Sewerage*	*Light*	*Heating*
☐ Mains piped	☐ Main sewerage	☐ Electric	Central heating
☐ Well pumped	☐ Septic tank	☐ Other	☐ Oil
☐ Other	☐ Latrine		☐ Solid fuel
☐ Drinking water	☐ Other		Fireplaces
☐ Showers (No.)			☐ Coal
			☐ Peat
			☐ Other

F OUTDOOR FACILITIES

Major games (football pitches, etc.) No. ..... Area ..... (acs.)
Minor games (basket-ball, volley-ball, tennis, etc.) ..... Tarmac ..... sq. ft.
Other ..... sq. ft.

Dressing rooms, Lem. rooms .....
Parking space ..... sq. ft. Tarmac .....
(private) Other .....

G BUILDING PLANS

	Decision to build (date)	Department of Education sanction to proceed (date)	Drawings and plans sanctioned (date)	Sanction to seek tenders (date)	Building to start (date)
Replacement	.....	.....	.....	.....	.....
Extension	.....	.....	.....	.....	.....
No. classrooms	.....				
Pupil-places	.....				

1 Metric measurements have been used in this study but answers on the questionnaire were given in feet

Data under the *enrolment* and *age distribution* headings were provided in questionnaires framed as Forms 2 and 3.

FORM 2 Enrolment trend

Year	Sex	First-level grades							
		Pre-first level	I	II	III	IV	V	VI	Total
1966/67	M	.....	.....	.....	.....	.....	.....	.....	.....
1970/71	F	.....	.....	.....	.....	.....	.....	.....	.....

Year	Sex	Second-level grades															
		1st year		2nd yr		3rd yr		Total lower stage		4th yr		5th yr		Total higher stage		Grand Total	
		Day	Boarding	D	B	D	B	D	B	D	B	D	B	D	B	D	B
1966/67	M	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1970/71	F	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

FORM 3. Age distribution of enrolment

Year born	Age	First-level grades 1970/71							
		Pre first level	I	II	III	IV	V	VI	Total
1967	4								
1966	5								
...									
TOTAL									

	Second-level age-group																	
	11		12		13		14		15		16		17		18		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1966/67																		
1st year																		
2nd year																		
3rd year																		
4th year																		
5th year																		
1970/71																		
...																		

For higher-stage second-level enrolments, questionnaires were also provided to give data on the subject-group alternatives pursued, as in Form 4.

FORM 4. The choice of higher-stage subject alternatives.

Year	Language		Science		Busn. studies		Technical		General		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1966/67												
...												
1970/71												

Questionnaires asking for data on school transport were framed in the light of the regulations governing the school transport scheme in Ireland and were similar for first and second levels, with the exception that two and three miles respectively were taken as the distances beyond which pupils became eligible for free transport. The headings were as shown in Form 5.

FORM 5. Second-level transport, 1970/71

	Under 3 miles					Over 3 miles				Other CA				Boarders			
	Walk	Bicycle	Pub. bus	Sch. bus	Other	W	B	PB	SB	O	B	PB	SB	O	Under 3 m.	Over 3 m.	Other CA	Other Co
M																		
F																		

FORM 6. Teaching staff, 1970/71

	First-level lay		First-level religious		
	Trained	Untrained	Trained	Untrained	Total
M					
F					

	Second-level lay		Second-level religious		Total	Full-time equiv. teachers
	Full-time	Part-time	Full-time	Part-time		
M						
F						

FORM 7. Teaching-staff qualifications, 1970/71

	Arts				Science				Busn. studies				Technical			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D

A = Master's degree, B = Primary degree, C = Teacher-training course, D = Pedagogical qualification.

FORM 8. Recurrent expenditure, 1970/71 (£)[1]

Year	Teacher cost	Non-teacher cost				
		Admin	Maint	Trans	Board	Total
1966/67						
...						
1970/71						

1 Data on recurrent expenditure and financing available only from the public schools, additional data in this regard was provided by the Department of Education.

FORM 9. Recurrent financing, 1970-71

	Public			Private		
		Dept. Educ. grant				
Year	Salaries	Capitation	Local auth.	Fees	Other	Total
1966-67						
...						
1970-71						

Explanatory instructions on completing the questionnaires referred mainly to the definition of terms and classification. For example, the full-time equivalent of part-time teachers was calculated by dividing the annual total of part-time teaching hours by the annual total obligation hours for a full-time teacher, adding the number of full-time teaching staff and making certain allowances for approved absences and for day-class teachers' time devoted to apprentice training and adult education. Similarly detailed instructions were given for the classification of recurrent expenditure. Any additional relevant comment was solicited.

Returns and statistics of the County Education Office and of the Department of Education also constituted major sources of supplementary data.

C. FIELD WORK

Completion of the questionnaires and collection of data were directed from the County Education Committee offices through nine second-level school principals, one for each catchment area, during a two-week visit to the county. Simultaneously, the survey director interviewed second-level private school principals personally. Interviews were also conducted to collect published and unpublished data and other information on demography, economic and social development, physical planning, etc., from county and regional officers such as the Regional Industrial Development Manager, Regional Transport Manager, Regional Tourist Officer, County Agricultural Officer, County Development Officer, County Engineer, County Medical Officer of Health, County Employment Officer, County Librarian. Field visits were made to advise data collectors and, at the end of the second week, the nine principals delivered completed questionnaires and data at a final checking meeting at the County Education Office. By arrangement with the National Commission for Unesco, interviews were conducted with Department of Education officials in Dublin both before and after the field visit.[1]

2. Approach, criteria and indicators

A. FRAMEWORK

Preparation of the school map may be envisaged as the geographic illustration of proposals to provide a certain *educational supply* (i.e. a network of schools), to satisfy *effective educational demand* (i.e. a target-year projected enrolment). Before calculating this future effective demand, which is a key variable, it is first necessary to make an analysis and diagnosis of the evolution of actual enrolments over recent years. Similarly, before making proposals to cater for future enrolments, it is necessary to analyse and diagnose the existing supply network. The framework within which this exercise is conducted may be outlined as in Figure 6.[2]

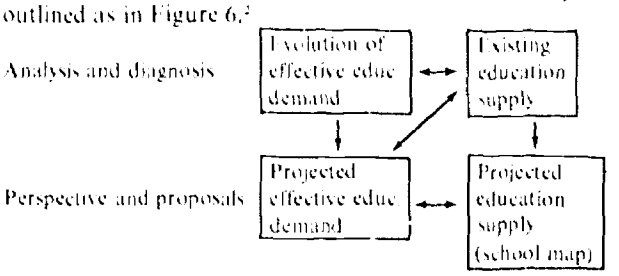


FIGURE 6. *Analysis and diagnosis of the existing network*

B. NATURE OF ANALYSIS

Analysis (mainly quantitative) is historical, comparative and typological in nature, including cost and financing analysis in as much detail as available data will allow. The main focus of the study is on the *rational location of first- and second-level schools* and only such qualitative factors are considered as are relevant to this aspect. Similarly, analysis of administrative organization, control and implementation is excluded.

Quantitative trends from 1966 form the main material for flow analysis, although pertinent trends outside this time-series are also taken into account. Internal comparative analysis is by the nine second-level catchment areas in the county; the main typological divisions for the comparison of schools are: large/small; urban/rural; public/private; boarding/day.

C. CRITERIA AND INDICATORS

The nature of the educational system and especially its objectives, structure, regulations and the norms pertinent to school location, constitute the over-all general criteria against which analysis and diagnosis of the network must be made. The current course structure of the Irish educational system is shown in Table 54.

TABLE 54. Present structure of the Irish educational system.

Level	Category	Length in years	Notes
First	Kindergarten	2	Admittance age: 4 (voluntary).
	Grades I-VI	6	Compulsory school: 6-14 yrs.
Second	Lower stage	3	Admittance age: 11 years 8 months; (no selective examination).
	Higher stage	2	No selective examination; no targets for subject choice.

1. The preparation of this case-study was exceptional in that one of the authors, who was formerly County Education Officer and thus familiar with the local scene, was able to collect all the basic data during a brief two-week period for later preparation of the study at the IIEP. Experience shows, however, that whenever possible such studies are better prepared in the country for better still in the region concerned, where continuous build-up and checking of data and information are possible while the drafting of the report progresses.
2. It is worthy of note that *educational supply* and *effective demand* interact

Kindergarten and grades I-VI are taught in the same first-level establishments; the full higher-stage course is not at present supplied in all second-level establishments.

The minimum enrolment size for first-level schools is seventy-five and the 240–300 school with one teacher per class is preferred; the minimum for second-level schools is 400 (rural) and 800 (urban) with a maximum enrolment size of 1,600.

Detailed indicators for analysis of the existing network were prepared by school, catchment area or region, as follows:

i. Enrolment analysis

(a) Historical: absolute and percentage growth of enrolment for boys and girls over recent years under the headings: catchment area; nature of school (size, day/boarding, public/private); grade; lower/higher stage.
(b) Flow: admission, promotion, repeater, drop-out and transfer rates by catchment area; outflow and inflow of pupils in the region.
(c) Participation: enrolment ratio, second level/first level by catchment area; first and second level/total population; first and second level/active population (by region).
(d) Spatial: analysis of distance and travel time of day pupils by catchment area; other rates, e.g., pupil density; pupils carried/total day pupils; bus miles/pupils carried; inter-catchment area travel matrix.

ii. Teaching

(a) Teachers: part time/full time; full-time equivalent; pupil/teacher; (and for full-time teachers only) male/female; university graduates/training-course teachers; graduates pedagogically trained/total graduates; qualifications by discipline (arts/science/business studies/technical); turnover rate; average age of teachers.
(b) Curriculum: choice of second-level higher-stage alternatives by male and female pupils, (language/science/business studies/technical/general).
(c) Teaching equipment: availability of specified modern audio-visual teaching aids.

iii. Other services

(a) Non-teaching staff: administrative; maintenance; and other staff (per pupil).
(b) Equipment: availability of certain modern items of administrative and maintenance equipment;
(c) Other: quantitative description of boarding; canteen; welfare; and other facilities.

iv. Recurrent costs and financing

(a) Costs: comparative analysis of cost trends over recent years for such items as teachers, administration, maintenance, transport and boarding, broken down under the headings of absolute expenditure, relative (percentage) cost, and unit cost per pupil; and comparative analysis of the trends of the main factors influencing unit costs, such as average salary per teacher, pupil/teacher ratio, and the percentage of trained teachers.
(b) Financing: comparative analysis of absolute, relative and unit of financing trends over recent years under the headings: public financing (government, local authority); private financing (fees, other).

v. Physical facilities

(a) External facilities: grounds; tarmac playground; games area per pupil;
(b) Internal facilities: comparative analysis of the teaching accommodation available (general, special and other classrooms, pupil-places and condition), non-teaching accommodation (administration, maintenance, storage, etc.), mechanical services (water, sewerage, heating and lighting, etc.), teaching area and over-all area per pupil.
(c) Utilization: comparative analysis of time and space utilization rates.

Full-time course utilization of classrooms

Time utilization rate (TUR): total weekly hours for which classrooms are actually used by classes as a percentage of total weekly hours for which classrooms are available (from full-time courses daily opening to closing).

Space utilization rate (SUR): total weekly pupil-place hours actually used by pupils as a percentage of total weekly pupil-place hours available.

Over-all utilization of internal and external facilities

Comparative analysis of over-all weekly time and space utilization by both the pupils and the community at large, i.e. actual over-all weekly hours of use as a percentage of the possible time utilization and the rate of occupation for the week.

vi. Capital costs and financing

(a) Costs: area and cost norms for buildings (i.e. minimum-maximum of teaching, circulation and ancillary area per pupil in square metres and minimum-maximum costs per square metre); other quantitative norms for school buildings.
(b) Financing: capital financing regulations.

3. Analysis of existing school networks

A. GENERAL

Data and information for the County Sligo school networks were collated, classified and analysed comparatively in accordance with the approach, criteria and indicators given in the previous section.

On maps for first and second levels showing physical relief, main towns and communication routes, the geographical location and size of each school in 1971 was given by a simple system of symbols; maps to the scale of one-quarter inch to one mile were found convenient.[1]

Analytical comparison was made separately for the two levels by the nine second-level catchment areas already de-

1. Scale one-quarter inch to the mile is close to 1:250,000, i.e. 1 cm = 2.5 km or 0.253 ins = 1 mile

fined by regulation for the county. Analysis and diagnosis were made under the main headings: *enrolment, transport, teaching staff, curriculum, physical facilities* and *costs and financing*. Specific methodological points will now be made in turn for each of these headings.

B. ENROLMENT

Since catchment areas do not coincide with any census units, it was necessary to describe the regulation boundaries on a map having the most detailed census areas, i.e. eighty-two district electoral divisions for the county, and to make population apportionments accordingly along the catchment area boundary lines. Fairly accurate population figures by age-group were then available for comparative *historical, flow, participation* and *spatial* analysis of enrolments.

In addition to the usual admission and promotion rates, pre-compulsory kindergarten participation for 4- and 5-year-olds, and the percentage of the 10–14 age-group enrolled in the first as against the second level were of particular interest.

Real participation rates were conveniently calculated for the first level since pupils normally attend the closest school. For the second level these rates must be 'apparent' because of quite significant inter-catchment area movement; the extent of this movement was assessed later.

C. TRANSPORT

Spatial analysis of the origin of all pupils and of those served by school transport was made by catchment area for the first level and by school for the second level. A map was made to illustrate pupil origin and the main travel trends of second-level pupils in the county. A matrix table giving detailed inter-catchment area movement was also used and the causes of this movement were discussed.

D. TEACHING STAFF

The level of qualified and full-time teachers employed and their utilization was analysed comparatively, by school size and catchment area for the first level, and by school for the second level.

E. CURRICULUM

The availability of modern audio-visual aids was examined comparatively and the choice of second-level higher-stage alternatives by boys and girls was analysed.

F. PHYSICAL FACILITIES

The standard and utilization of existing internal and external facilities was analysed comparatively (also their age, condition, nature and whether accommodation is traditional built, pre-fabricated, owned or rented). This was done by application of the criteria given in the previous section. It was found desirable to distinguish between the *time utilization rate* and the *space utilization rate* since there may be a high TUR simultaneously with a low SUR because of small classes. Only general and special classrooms were taken into consideration in this calculation; 'other' accommodation such as a library, gymnasium, etc., was excluded.

An assessment of building-in-progress and plans for further building was also made.

G. COSTS AND FINANCING

Recurrent cost and financing analysis was necessarily limited by the non-availability at private schools of the requested data, especially boarding and canteen costs. Returns for public schools and supplementary data provided by the Department of Education enabled a crude cost and financing analysis to be made.

Analysis was made by purpose and source for absolute, relative and unit cost and financing respectively, in accordance with the indicators given in the previous section. Comparison was also made between costs and financing in second-level public urban and rural schools.

4. Enrolment forecast to 1976

A. ECONOMIC AND SOCIAL DEVELOPMENT

The enrolment forecast to 1976 is of interest within the context of decision-making on the *rational location of first- and second-level schools*. But decisions on school location must be made in the light of likely regional development far beyond the 1976 time horizon. Thus, before making the enrolment forecast, it was necessary to examine the long-term development perspective for the county, especially the economic and social development prospects and demographic evolution, which are, of course, correlated.

Assessment was made of the economic and social structure of the county and the evolution of employment in agriculture, industry and services, as envisaged in the development plan for the region.[1] Relief maps were prepared showing towns and communications, and the agricultural and industrial activities in 1971. Development prospects, since they might influence educational demand in the various catchment areas, were examined, mainly through recent trends in the employment structure, the likely extent of the continued drift from agriculture, urbanization rates and projected industrial development plans.

B. DEMOGRAPHIC ANALYSIS AND PROJECTION

Detailed demographic analysis by catchment area was made, including migration analysis.[2] A catchment area migration index was prepared for the school-going quinquennial age-groups 0–4, 5–9, 10–14 and 15–19. Populations for these age-groups in 1961 (male and female), compared with hypothetical populations for them in 1966 (0–4 of 1961 becomes 5–9 of 1966), and the actual census figures, give the net migration over the period for these age-groups.

A population projection to 1976 for the age-groups 5–9,

1 *Regional industrial plans, 1973–77*, op. cit.

2 Since the 1971 Census information was not yet available, the most recent census figures were used.

10–14, and 15–19 was made by catchment area and adjusted: for migration in accordance with the index; for economic and social development in accordance with the regional plan; and for the educational reform effect. It was assumed that half of the additional manufacturing jobs to be created would go to migrants into County Sligo who might have on average three school-going children spread equally between the three quinquennial age-groups. Adjustments for educational reform included: growth in pre-first-level enrolments; the raising of the school leaving age to 15 in 1972; automatic promotion and increased participation in the higher stage of second level, because of increased educational opportunity for pupils who would otherwise migrate.

C. ENROLMENT FORECAST

i. First level

Feasible participation targets for 4-year-olds for 1976 were set by catchment area with reference to the position in 1971 and using ST (the best developed catchment area) as a guideline. A participation rate of 100 per cent was taken for the 5–9 age-group for all catchment areas, while feasible targets for the 10–14 age-group were set taking account of the base-year participation and of the continued decrease of first-level enrolments from this group because of earlier entry to the second level.[1]

Four-year-olds in 1976 were estimated from 1971 births by catchment area; the 0–4 age-group of 1971 with adjustments for survival and migration becomes the 5–9 age-group for 1976; and similarly the 5–9 of 1971 becomes the 10–14 of 1976. By applying the targets set to the population projection, the enrolment forecast by catchment area for 1976 was calculated.

ii. Second level

The best forecast of 1976 second-level enrolment is based on existing first-level enrolments and on the targets set for admission and promotion rates. Thus, first-level grade II of 1971 gives the potential enrolment to be admitted as the first year in second level 1976, etc. In setting targets for admission and promotion rates, allowance was made for survival, migration, economic development, social change, educational reforms and net inflow-outflow of pupils across county boundary lines.

By applying target admission and promotion rates to first-level grades II, III, IV, V and VI of 1971 by catchment area, and by making the above allowances, a second-level enrolment forecast for 1st, 2nd, 3rd, 4th and 5th years was made for 1976.

5. Proposals for first-level rationalization

A. CRITERIA

Two alternative rationalization schemes were proposed and assessed: one within the present policy with the two-teacher school (or minimum enrolment of seventy-five) as the minimum size of establishment, and the other with acceptance of the one-teacher school. The location of schools at 'growth points' in towns, villages or on main communication routes was the main guideline. This complies with the concept of concentration, whereby the school forms a part of the social services provided at certain centres and also plays a more active community role.

B. ASSESSMENT OF TRENDS

Proposals then hinged largely on an assessment of the development prospects of schools at the minimum and maximum margins and the identification of growth points for location. Accordingly, schools just below and just above the minimum and maximum size norms (for both schemes) were examined individually to assess their development prospects. The following interrelated criteria were used in this assessment: enrolment trend and participation in recent years; catchment area radius; pupil population density; proximity of neighbouring schools; demographic trends in the area; urbanization rate in the area; agricultural employment ratio.

Projected enrolments for these schools were also shown on graphs. Results from this assessment gave indications for plotting the rationalized school network as follows:

i. Schools at the minimum size margin

(a) Not viable in short or medium term: phase out;
(b) Viable in short term but not in medium term: temporary provision;
(c) Viable in short and medium term: more permanent provision;
(d) Cluster of small schools not viable in short or medium term: new central school.

ii. Schools at the maximum size margin

(a) Static: no change;
(b) Declining: probably no immediate change;
(c) Growing: decision to be made on 'hiving off' or to open a new school.

It was obvious, in this instance, that rationalization must be a two-phase operation. Many small schools are due for closing in the short term and yet, because of demographic trends, many others must also close in the medium term. Thus it was important to look at the medium-term picture since this has a bearing on the nature and cost of additional accommodation (permanent or temporary) to be provided in the short term, and also because the second-phase consolidation might more effectively align the school network with other physical planning arrangements throughout the county.

C. EFFECT ON COSTS

From the economic viewpoint, implementation of the proposals mainly affects the utilization of teachers, and the provision of accommodation and transport for pupils whose schools are closed. A cost analysis was made to

[1] An element for handicapped children who would attend special schools was incorporated in the participation targets, the likely participation rate for the 5–9 age-group was so close to 100 that, for convenience, this figure was taken

indicate the change in absolute, relative and unit costs attributable to the implementation of the proposals. The annuated capital cost for additional accommodation was measured against the annual recurrent cost saving due to rationalization, in order to indicate the net effect on costs. The value of closed schools was not taken into account in the cost analysis. Schools for consolidation in the first scheme were then classified into three groups, as follows:

(a) reduced unit costs with improved pedagogical conditions;
(b) equivalent unit costs with improved pedagogical conditions;
(c) increased unit costs with improved pedagogical conditions.

D. RATIONALIZED MAP

The selected scheme was illustrated on a relief and communications map indicating the schools for closing and the centres to which their pupils might go, schools for temporary or permanent development, and new central schools to be built.

6. Proposals for second-level rationalization

A. APPROACH

The existing network was, at first, completely disregarded and a map prepared to locate geographically the maximum potential lower- and higher-stage enrolment for 1976 (i.e., grades II, III, IV, V, VI in 1971). The supply alternatives for this potential demand were examined:

(a) to provide the full range of five subject-groups;
(b) to provide a lesser but reasonable range (three or four subject-groups);
(c) to provide a two-tier system of junior and senior schools.

Only alternative (b) was found to be realistic for County Sligo because of the pupil population density.

On the map of maximum potential demand, taking into consideration the size of school necessary to provide three or four alternatives and the geography of the area, catchment areas were outlined and the 'centres of gravity' of the potential demand indicated. The next step was to confront the existing network with this theoretical organization.

B. PROPOSAL FOR RATIONALIZATION

A rational compromise between this theoretical network and the present network was reached by following the present policies on school size and the provision of alternatives, and taking into account existing locations, accommodation facilities and obstacles. The concepts of concentration, community utilization and alignment with over-all economic, social and physical planning were considered in location decisions. Where theoretical locations meant that the enrolment 'centre of gravity' fell in rural areas, locations were shifted to the nearest 'growth points'.

The rationalization proposal was then illustrated on a relief and communications map indicating the schools for closing and the centres to which their pupils might go, new schools for development and the subject-alternative availability at all schools in the new network.

C. EFFECT ON COSTS

A cost analysis was made showing the absolute, relative and unit cost effects of the implementation on annual recurrent costs. From an assessment of present building plans, and additional accommodation which must be provided in any case, the capital cost directly attributable to implementation of the rationalization proposals was isolated. This capital cost was annuated and measured against the annual savings in recurrent cost to indicate the net effect of implementation.

The use of closed schools was not taken into account in this assessment, although it was expected that these might be helpful in first-level rationalization, for adult education or even for industrial development purposes.

IX. Parameters in school mapping

1. Introduction

The function of the school map is, in simple terms, to help to answer the following questions for a network of schools: how many; where; what kind; and at what cost? These are quantitative questions implying that precise quantitative replies are expected. Whether a useful mathematical model is feasible to yield such data remains to be seen. However, the relationships between the different variables involved are sufficiently quantifiable to enable going further than the preparation of a conception model, where the variables and components are no more than simply isolated. In this chapter, therefore, a 'relations model' is used whereby the parameters are not only collated on the basis of their functional relationships, but these relationships themselves are fairly closely delimited, if not quite mathematically defined.

2. Educational objectives and policies

Even such generalized educational objectives as the following have an overriding influence on the level of enrolment and the nature of the supply network of schools:

(a) equality of educational opportunity;
(b) education in accordance with aptitudes;
(c) improved quantitative and qualitative standards;
(d) improved economic efficiency;
(e) taking account of social demand and the manpower needs of the economy.

An influence on enrolment is exercised mainly by regulation and stimulation such as the following:

(a) pre-compulsory admittance and the provision of pre-compulsory facilities;
(b) a compulsory schooling period;
(c) provision of facilities for handicapped pupils;
(d) post-compulsory regulations on the schooling period, organization and facilities, e.g. school transport, educational guidance and various subsidized schemes.

On the supply side, and depending on the extent of state intervention, the whole development of the network of schools is determined by the setting and implementing of norms and standards; an influence on implementation is mainly exercised through financial control.

3. Enrolment parameters

The two main variables in projecting enrolments are *demographic trends* and *participation rates*. In examining these variables, it is better to deal separately with the first and second levels.

A. FIRST LEVEL

Educational demand is estimated through the application of target participation rates to the projected population for pre-compulsory and compulsory age-groups in the final year of the plan. Targets for participation rates are realistically set in the light of base-year rates disclosed by analysis. This demand is adjusted to take account of migration indicated by a separate analysis. The estimated enrolment is distributed between first- and second-level schools and schools for handicapped children, as shown in Table 55 (overleaf).

B. SECOND LEVEL

The best projection of second-level enrolments is based on existing first-level enrolments by grade, and on targets set for admission and promotion rates. Thus, enrolment in grade II in 1971 gives the maximum potential enrolment in second-level year 1 in 1976. In setting the targets allowance must be made for the survival ratio, change in admission trends, planned educational reforms and migration trends. Adjustments must also be made for planned economic and social developments which have a bearing on migration and affect second-level enrolment, and also for the net movement of pupils into and out of the catchment areas under study.

The parameters involved in the projection of second-level enrolments may then be shown as in Table 56.

TABLE 55. Projection of first-level enrolments[1]

Age-groups	Demographic projection	Participation rates (target %)	Initial projected educational demand	Projected educational demand (adjusted)	
				Public	Private
Pre-compulsory					
First-level schools	...	...	...	....	....
Schools for handicapped	...	...	...	....	....
Compulsory					
First-level schools	...	...	...	....	....
Second-level schools	...	...	...	....	....
Schools for handicapped	...	...	...	....	....

1 Ideally, catchment areas for first-level schools will be used for the basic calculations but an aggregation of first-level catchment areas may be necessary for second-level catchment areas, or some other suitable administrative or census unit.

TABLE 56. Projection of second-level enrolments

	II (1st yr)	III (2nd yr)	IV (3rd yr)	V (4th yr)	VI (5th yr)	Total
First-level base year enrolment	...	...	...	...	...	...
Second-level admission rate(%)	...	...	...	...	...	..
Promotion rate(%)	...	...	...	...	...	...
Second-level enrolment projection	...	...	...	...	...	...

4. Supply network parameters

The two main variables in preparing proposals for a network of schools to supply projected enrolments are *school size* and *pupil population density*. The minimum or maximum enrolment size for schools is an educational policy decision. There is, however, a certain minimum and maximum beyond which school organization from any viewpoint is not rational, but within these limits there is also a range of optimal sizes depending on the emphasis to be laid on pedagogical, economic and social factors. Different minima and maxima may also be decided upon for urban and rural areas. Pupil population density is, in turn, a function of demographic trends.

Given the norm for *minimum-maximum school size* and the *pupil population*, then *catchment areas* may be defined or, to approach it from another angle, the feasibility and rationality of a network of schools (first or second level) may be checked. This exercise also involves the examination of topography, habitation patterns, communication routes and the outline of catchment areas. The parameters involved are shown in Figure 7.

TABLE 57. Density of pupil population per 100 square kilometres required under various enrolment ranges, pupil/teacher ratios and transport schemes

	Range of pupil population density per 100 sq. km					
	First level[1]		Second level[2]		Teachers[3]	
	Pedestrian	With transport scheme				
Enrolment	6 km radius[4] (113.1 sq. km)	12 km radius (452.6 sq. km)	18 km radius (1 018.3 sq. km)	24 km radius (1 810.3 sq. km)	First level	Second level
15- 35	13.2- 30.9	3.3- 7.7	1.5- 3.4	0.8- 1.9	1	1- 2
36- 70	31.8- 61.9	8.0- 15.5	3.5- 6.9	2.0- 3.9	2	2- 4
71-105	62.8- 92.9	15.7- 23.2	7.0-10.3	3.9- 5.8	3	4- 6
106-140	93.8-123.8	23.4- 30.9	10.4-13.8	5.9- 7.7	4	6- 8
141-175	124.7-154.8	31.1- 38.7	13.9-17.2	7.8- 9.7	5	8-10
176-210	155.7-185.8	38.9- 46.4	17.3-20.6	9.7-11.6	6	10-12
211-245	186.7-216.8	46.6- 54.1	20.7-24.1	11.7-13.5	7	12-14
246-280	217.6-247.7	54.4- 61.9	24.2-27.5	13.6-15.5	8	14-16
281-315	248.6-278.7	62.1- 69.6	27.6-30.9	15.5-17.4	9	16-18
316-350	279.6-309.7	69.8- 77.3	31.0-34.4	17.5-19.3	10	18-20
351-385	310.6-340.7	77.6- 85.1	34.5-37.8	19.4-21.3	11	20-22
386-420	341.5-371.6	85.3- 92.8	37.9-41.2	21.3-23.2	12	22-24
421-455	372.5-402.6	93.0-100.5	41.4-44.7	23.3-25.1	13	24-26
456-490	403.5-433.6	100.8-108.3	44.8-48.1	25.2-27.1	14	26-28
491-525	434.5-464.6	108.5-116.0	48.2-51.6	27.1-29.0	15	28-30

1 Pupil/teacher ratio, 35:1.
2 Pupil/teacher ratio, 17.5:1.
3 These figures relate *quite separately* to the first-level *or* second-level teachers which would be required to cater for the first-level *or* second-level enrolment range figures shown and with the pupil/teacher ratios assumed. They are an indication also of the accommodation required, depending on the nature of the school.
4 $\frac{100}{\pi 5^2} \times 15 = 13.2$ etc.; pupil population density figures may indicate target participation or maximum pupils.

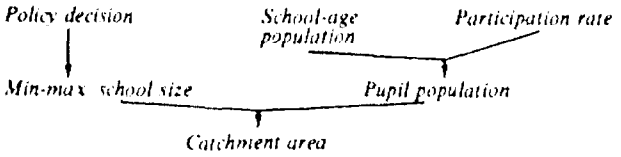


FIGURE 7. *Parameters defining a catchment area*

Also, since the limits of accessibility on foot may be isolated, the range of transport schemes required to reach certain levels of pupil population may also be defined. Furthermore, given the policy on the pupil/teacher ratio, teacher and accommodation requirements are functionally related to a specified catchment area.

Table 57 has been constructed to illustrate the functional relationship between school size, pupil population density and size of catchment area. In this case, 6 km. (3.7 m.) has been taken as the catchment area radius denoting the pedestrian limit; a lower figure could equally well have been taken. Three other cases for transport schemes at 12 km. (7.4 m.), 18 km. (11.2 m.) and 24 km. (14.9 m.) respectively have been included for illustrative purposes. The table has been built up from the fairly realistic premise of co-educational schools having a first-level pupil/teacher ratio of 35:1 (with fifteen the lowest possible enrolment tolerated in one school), and a second-level pupil/teacher ratio of 17.5:1. The notion of range of enrolment and pupil population density is incorporated in the table to take account of the dynamism of enrolment in the real situation, where a certain increase or decrease must first take place before the addition or laying-off of a teacher is warranted. The figures used also refer to rural areas and are oriented towards

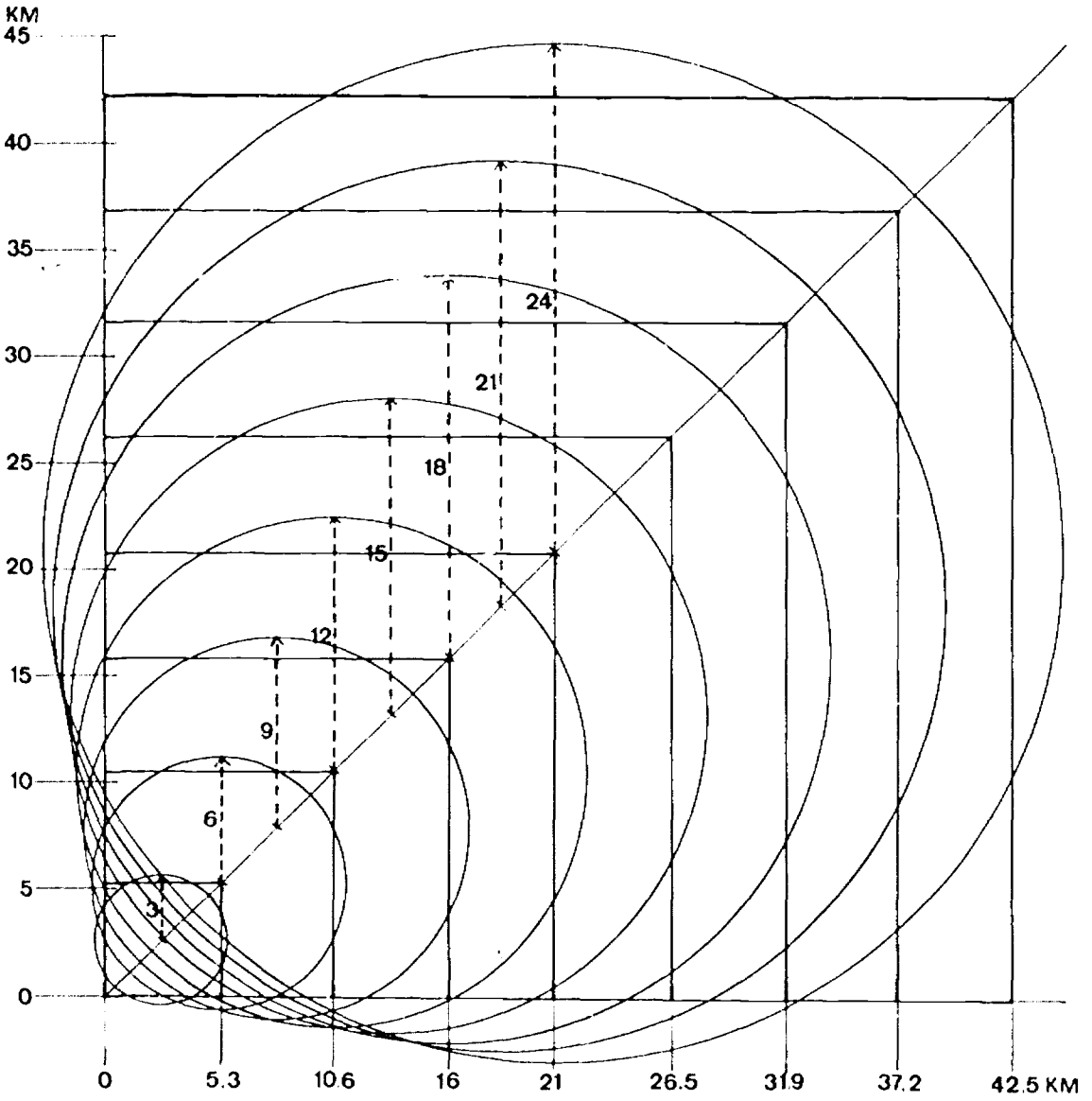


FIGURE 8. *Spatial representation of catchment areas*

problems of minimum school size. A decision on maximum school size relates mainly to urban situations and depends upon administrative and town-planning factors, in addition to the economic and pedagogical ones.

TABLE 57a. Calculation of catchment areas

Radius in km r	Area in km² πr^2 ($\pi = 3.14$)	Square root of area x
3	28.3	5.3
6	113.1	10.6
9	254.7	16.0
12	452.6	21.0
15	707.1	26.5
18	1 018.3	31.9
21	1 386.0	37.2
24	1 810.3	42.5

Catchment area = πr^2 = x^2
$x = \sqrt{(r^2 \cdot \pi)}$

A further insight into the applicability of the functional relationships between pupil population density and potential school size is given in Figure 8. Catchment area sizes, to the same scale as that used for the school mapping study are defined for various school radii on the basis of the calculations which are set out in Table 57a. Applied to a pupil population map of any region and taken in conjunction with Table 57, this figure can be a quick guideline to the size of school warranted in any area, or the size of catchment area required to justify a certain size of school. It is obvious that the school radii shown here will not correspond with the actual distance which pupils at the extremity of the area may have to travel, because roads do not radiate in straight lines from the school to the home; but allowances for distances can be made when the topography and nature of the road system are considered. Also, it is known that the population may not be spread evenly throughout an area, e.g. homes may be distributed along a canal, river or road in a 'ribbon' style, but again these characteristics can be allowed for and, as will be seen later, location is not automatically at the geographical centre. A final decision on location requires consideration not only of these matters but also of the location of other schools, towns, growth centres, etc.

Components, relationships and functions discussed so far constitute the basic guideline for school network development, but the rationalized school map must still emerge from the existing network. Accordingly, factors in the present network relevant to development, discussed in detail in Chapter VIII, must be examined further before proposals for rationalization can be articulated.

It must be noted that assessment of schools at the minimum and maximum margins also involves many criteria (e.g. topographical and social) which are not fully quantitative and, accordingly, this part of the exercise is not so amenable to the application of a mathematical model.

As a result of this assessment, a rationalization scheme (or a number of schemes, depending on the norms applied), which gives the number of schools and their location, will not necessarily be placed at the geographical centre or 'centre of gravity' (from the pupil potential viewpoint) but rather at the 'growth centre' nearest to both to comply with the modern concept of 'concentration' (now almost universally accepted) where it will become part of the services in that growth centre and thus play a more active community role.[1]

It must be added that the following policy decisions influence the norm for the minimum size and, accordingly, the location of second-level schools:

(a) provision of a *minimum* range of subject alternatives;
(b) ensuring acceptable utilization rates for specialist accommodation and teachers;
(c) provision of lower and higher stages, either in the same establishment or separately.

In this regard, further discussion of the minimum enrolment size and the provision of a range of subject alternatives vis-à-vis utilization rates is undertaken in Chapter X. Also, as has been seen earlier, the second-level pupil population is derived from existing first-level enrolments rather than from a percentage of the school-age population. If lower and higher stages are to be provided in separate establishments, then separate catchment areas must be defined for these schools. Finally, pupils residing beyond the limit for feasible daily travelling, for which a total daily travelling norm of ninety minutes is often set, must be catered for as boarders.

It has been shown earlier that teacher and accommodation requirements are functionally related to certain defined catchment areas. If norms for teacher and non-teacher cost and area and cost limits for accommodation are given as well, then the cost of implementing proposed rationalization schemes may be calculated mathematically.

Finally, in Figure 9 a schematic relations model of the factors involved in building a school is given.

1 See D. B. W. M. van Dusseldorp, *Planning of service centres in rural areas of developing countries*, Wageningen, The Netherlands, International Institute for Land Reclamation and Improvement, 1971.

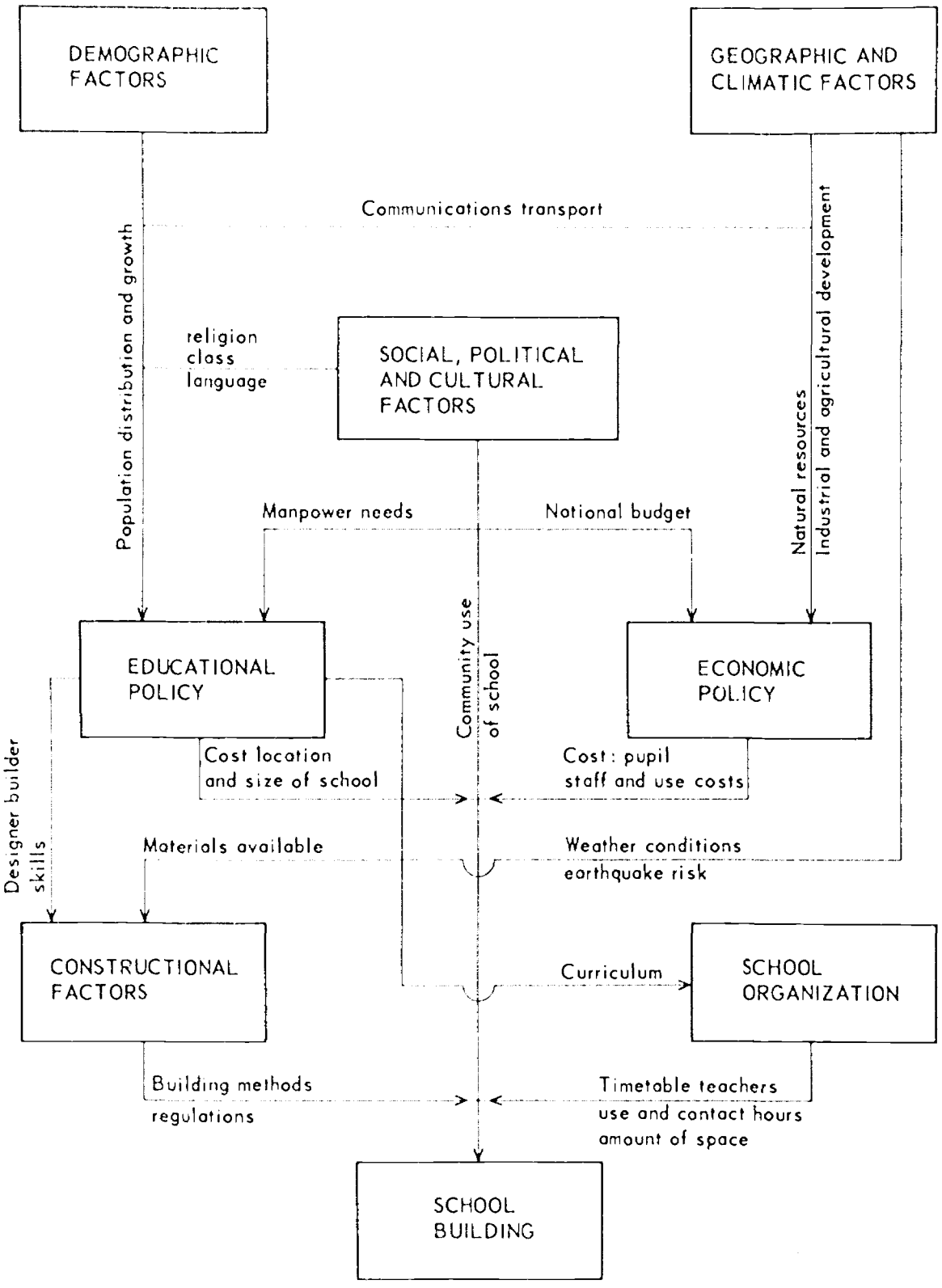


FIGURE 9 — *Influences on school building*

SOURCE — Unesco: *Comparative study of secondary school building costs*, Paris, 1971 (Educational studies and documents, new series, 4)

X. Second-level school size and utilization

1. Aims

To narrow the gap in equality of educational opportunity between urban and rural second-level pupils, it is necessary to broaden the curriculum and subject-group alternatives available to higher-stage pupils in rural areas. To do so requires more specialist classrooms and more specialist teachers. In order to reach acceptable time and space utilization rates for special subjects in special classrooms and a reasonably high usage of specialist teachers' skills, a certain minimum enrolment size for schools is necessary. A brief examination of likely utilization rates for different enrolment sizes in the Irish situation is made in this chapter.

2. Factors involved

The main factors involved in determining these enrolment sizes and utilization rates for a minimum supply of special classroom facilities are as follows: (a) type of school—junior, senior, co-educational;[1] (b) if co-educational, male/female proportion; (c) number of new entrants; (d) promotion and retention rates; (e) number of class-groups; (f) class-group size; (g) curriculum range and weekly time allocation to each subject; (h) subject-group options available at higher stage; (i) number of years for lower- and higher-stage courses.

3. Curriculum

An example of a weekly curriculum time allocation in the Irish situation has already been given in Table 49, page 69.

4. Specialist classroom utilization

On the basis of this curriculum, time utilization rates for the different specialist classrooms (if these classrooms are to be provided to equalize educational opportunity) may be calculated for a whole range of enrolment sizes, varying the factors given in section 2 above. The calculation will be developed here only to indicate the approximate size necessary to give acceptable utilization rates.

It is necessary to distinguish between time utilization and space utilization rates. Time utilization rate (TUR) means the percentage of official time-table hours for which classrooms are occupied by classes for teaching purposes. Space utilization rate (SUR) means the percentage of pupil places utilized during official time-table hours. Thus, with a large number of small classes a high TUR could exist simultaneously with a low SUR, which of course would not constitute efficiency.

A. JUNIOR SCHOOL ENROLMENTS OF 120 (i) AND 180 (ii)

Factors assumed: (Table 58)
(a) Both co-educational junior schools, the first (120) M:F = 1:1, the second (180), M:F = 2:1;
(b) First, two-stream and second, three-stream entry;
(c) Promotion rate, 100;
(d) Six and nine classes, respectively;
(e) Average class size, twenty;
(f) Lower stage, three-year course.

1 Junior school has lower stage course only, senior school has full five-year course

TABLE 58. Classroom TUR for junior schools with two- and three-stream entry, under certain conditions

Curriculum	120 enrolment (2-stream entry)			180 enrolment (3-stream entry)		
	Weekly hours	Classrooms required	TUR %	Weekly hours	Classrooms required	TUR %
General						
Irish	18			27		
English	18			27		
Mathematics	18	1[1]		27	1	
Civics	6			9		
Religious instruction	12			18		
Special						
Art/drawing	18	1	60	27	1	90
Woodwork/building science	9	1	30	18	1	60
Metalwork/engineering	9	1	30	18	1	60
Science	18	1	60	27	1	90
Home economics	9	1	30	9	1	30
Business studies	13½	1	45	18	1	60
Modern languages	12	1	40	18	1	60
Geography/history	13½	1	45	18	1	60
Physical education	6	1	20	9	1	30
TOTAL	180	10		270	10	

1. Theoretically, only one general classroom is required along with the range of special rooms, but this situation is unlikely to occur in reality where a lesser range of special rooms would be provided. This argument also affects the number of general rooms given in Tables 59, 60 and 61.

B. SENIOR SCHOOL ENROLMENTS OF 160 (i) AND 320 (ii)

Factors assumed: (Table 59)

(a) Both co-educational senior schools, both M:F = 1:1;
(b) First, two-stream and second, four-stream entry;
(c) Promotion rate, lower stage 100 per cent; retention rate, higher stage 50 per cent;
(d) First, six lower-stage and two higher-stage classes;
(e) Second, twelve lower-stage and four higher-stage classes;
(f) Average class size, twenty;
(g) Lower stage, three-year and higher stage, two-year course.

TABLE 59. Classroom TUR for senior schools with two- and three-stream entry (one and two higher-stage alternatives respectively) under certain conditions

Curriculum	160 enrolment (2-stream entry)			320 enrolment (4-stream entry)					
				Weekly hours					
					Higher stage				
	Weekly hours	Classrooms reqd	TUR %	Lower stage	Lang	Tech	Total hours	Classrooms reqd	TUR %
General									
Irish	27			36	9	6	51		
English	27			36	9	6	51		
Mathematics	27	1[1]		36	9	6	51	4[1]	
Civics	8			12	2	2	16		
Religious instruction	14			24	2	2	28		
Special									
Art/drawing	18	1	60	36		6	42	2	70
Woodwork/building science	9	1	30	18		9	27	1	90
Metalwork/engineering	9	1	30	18		9	27	1	90
Science	18	1	60	36		6	42	2	70
Home economics	9	1	30	18			18	1	60
Business studies	13½	1	45	27			27	1	90
Modern languages	30	1	100	24	18	6	48	2	80
Geography/history	22½	1	75	27	9		36	2	60
Physical education	8	1	27	12	2	2	16	1	53
TOTAL	240	10		360	60	60	480	17	

1. See footnote, Table 58.

C. SENIOR SCHOOL ENROLMENTS OF 480 (i) AND 640 (ii)

Factors assumed: (Table 60)

(a) Both co-educational senior schools, the first (480) M:F 2:1 the second (640), M:F 1:1;
(b) First, six-stream and second, eight-stream entry;
(c) Promotion rate, lower stage 100 per cent, retention rate higher stage 50 per cent;
(d) First, eighteen lower-stage and six higher-stage classes;
(e) Second, twenty-four lower-stage and eight higher-stage classes;
(f) Average class size, twenty;
(g) Lower stage, three-year and higher stage, two-year course;
(h) First, higher-stage alternatives—languages, science, technical—equal choice;
(i) Second, higher-stage alternatives choice—languages, 50 per cent, two classes; science, 25 per cent, one class; technical, 25 per cent, one class.

TABLE 60. Classroom TUR for senior schools with six- and eight-stream entry, under certain conditions

	480 enrolment (6-stream entry)							840 enrolment (8 stream entry)						
	Weekly hours							Weekly hours						
		Higher stage							Higher stage					
Curriculum	Lower stage	Lang	Sc	Tech	Total	Class-rooms reqd	TUR %	Lower stage	Lang	Sc	Tech	Total	Class-rooms reqd	TUR %
General														
Irish	54	9	6	6	75			72	18	6	6	102		
English	54	9	6	6	75			72	18	6	6	102		
Mathematics	54	9	9	6	78	11[1]		72	19	6	6	105	12[1]	
Civics	18	2	2	2	24			24	4	2	2	32		
Relig. inst.	36	2	2	2	42			48	4	2	2	56		
Special														
Art/drawing	54			6	60	2	100	72			6	78	3	87
Woodwork/bldg. sc.	36			9	45	2	75	36			9	45	2	75
Metalwork/engng.	36			9	45	2	75	36			9	45	2	75
Science	54		18	6	78	3	87	72		18	6	96	4	80
H. economics	18				18	1	60	36				36	2	60
Busn. stud.	36				36	1	100	54				54	2	90
Modern lang.	36	18	6	6	66	2	100	48	36	6	6	96	2	100
Geog./history	36	9	9		54	2	90	54	18	9		81	3	90
Phys. ed.	18	2	2	2	24	1	80	24	4	2	2	32	2	53
TOTAL	540	60	60	60	720	27		720	120	60	60	960	34	

1. See footnote, Table 58.

NOTE Some modern language and business studies lessons might be taken in general rooms, reducing TUR percentage in the special rooms and increasing it somewhat in general rooms. A gymnasium each for boys and girls would be available and these would be used also as assembly meeting rooms, etc. Library, music, career guidance etc., would also be included.

D. SENIOR SCHOOL ENROLMENT OF 800

Factors assumed: (Table 61)

(a) Co-educational senior school with M:F 1:1;
(b) Ten-stream entry;
(c) Promotion rate, lower stage 100 per cent; retention rate, higher stage 50 per cent;
(d) Thirty lower-stage and ten higher-stage classes;
(e) Average class size, twenty;
(f) Lower-stage, three-year and higher-stage two-year course;
(g) Higher-stage alternatives: language, science, commerce, technical and social studies subject-groups and equi-distribution of choice.

TABLE 61. Classroom TUR for senior schools with ten-stream entry, under certain conditions

Curriculum	Weekly hours: Lower stage	Higher-stage alternatives: Lang	Sc	Busn stud	Tech.	Gen.	Total hours	Classrooms reqd	TUR %
General									
Irish	90	9	6	6	6	6	123		
English	90	9	6	6	6	6	123		
Maths	90	9	9	6	6	6	126	17[1]	
Civics	30	2	2	2	2	2	40		
Religious instruction	60	2	2	2	2	2	70		
Special									
Art/drawing	90				6	9	105	4	88
Woodwork/building sc.	45				9		54	3	90
Metalwork/engineering	45				9		54	3	90
Science	90		18		6		114	4	95
Home economics	45					9	54	2	90
Business studies	67½			18		3	88½	3	98
Modern languages	60	18	6	9	6	9	108	4	90
Geog./history	67½	9	9	9		6	100½	4	84
Physical education	30	2	2	2	2	2	40	2	67
TOTAL	900	60	60	60	60	60	1 200	46	

1 See footnote, Table 58

5. Comment

From these examples, which are also illustrated in Figure 10, it is seen that with this provision of special classrooms and with this curriculum and under these conditions, an acceptable time utilization rate becomes possible around the 400 enrolment mark.

If the average class size were taken to be in the fifteen/twenty range, then enrolment ranges in the examples become:

A(i) 90–120	A(ii) 135–180
B(i) 120–160	B(ii) 240–320
C(i) 360–480	C(ii) 480–640
D 600–800	

With an average class size of fifteen/twenty, acceptable *time utilization rates* might be achieved for special classrooms in schools of 360–800 enrolment, but with a class size below twenty, it is certain that *space utilization rates* would be unacceptably low. Internationally, the average second-level class size varies from twenty-eight to forty-two.[1]

Other studies have shown that the cost/size relationship is represented by a U-shaped curve but that the optimum size differs from area to area and is extremely difficult to define.[2] A Dutch study on the influence of the type and size of second-level grammar non-boarding schools on recurrent expenditure shows that average cost per pupil decreases considerably from the school of enrolment size 100 to that of 600, but decreases by only 1 to 2 per cent for every increase of 100 in school size above 600.[3]

Finally, it is interesting to note that the Unesco secondary school study found the median size to be between 400 and 700 pupils, with technical schools tending to be larger than this median.

1 *Comparative study of secondary school building costs*, op. cit., p. 9

2 Ibid., and C. M. Sabuloa and G. A. Hickrod, 'Optimum size of school districts relative to selected costs', in *The journal of educational administration*, Armidale, Australia, University of Queensland Press, (Vol. IX, No. 2, October 1971).

3 Netherlands Central Bureau of Statistics, *Size and costs of secondary grammar schools*, The Hague, 1965, p. 8

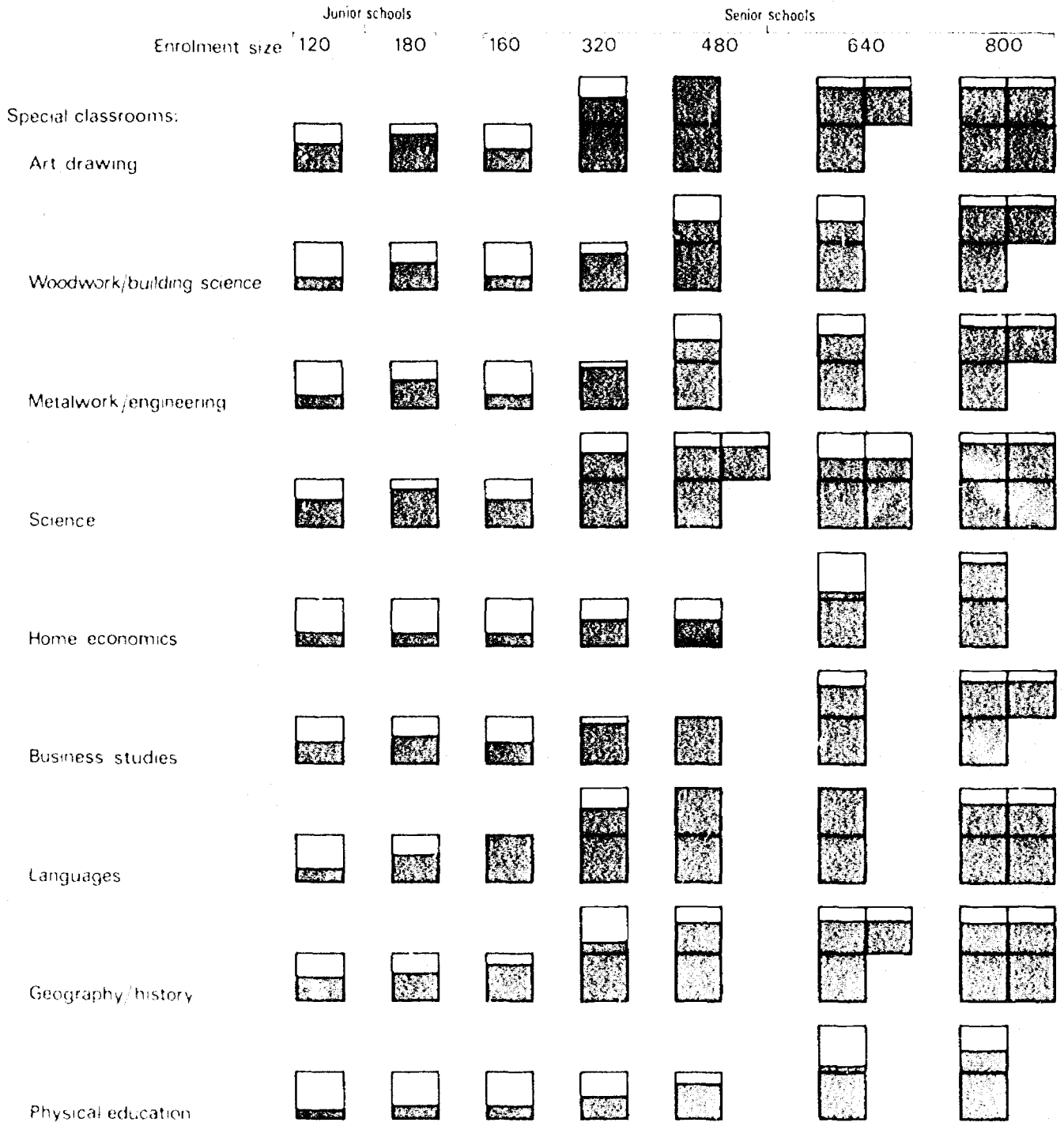


FIGURE 10 *Special classrooms required and TUR by school size to serve the Irish situation*
NOTE Each square represents one classroom; shaded area indicates *TUR*

Appendixes

Appendix I. Additional data

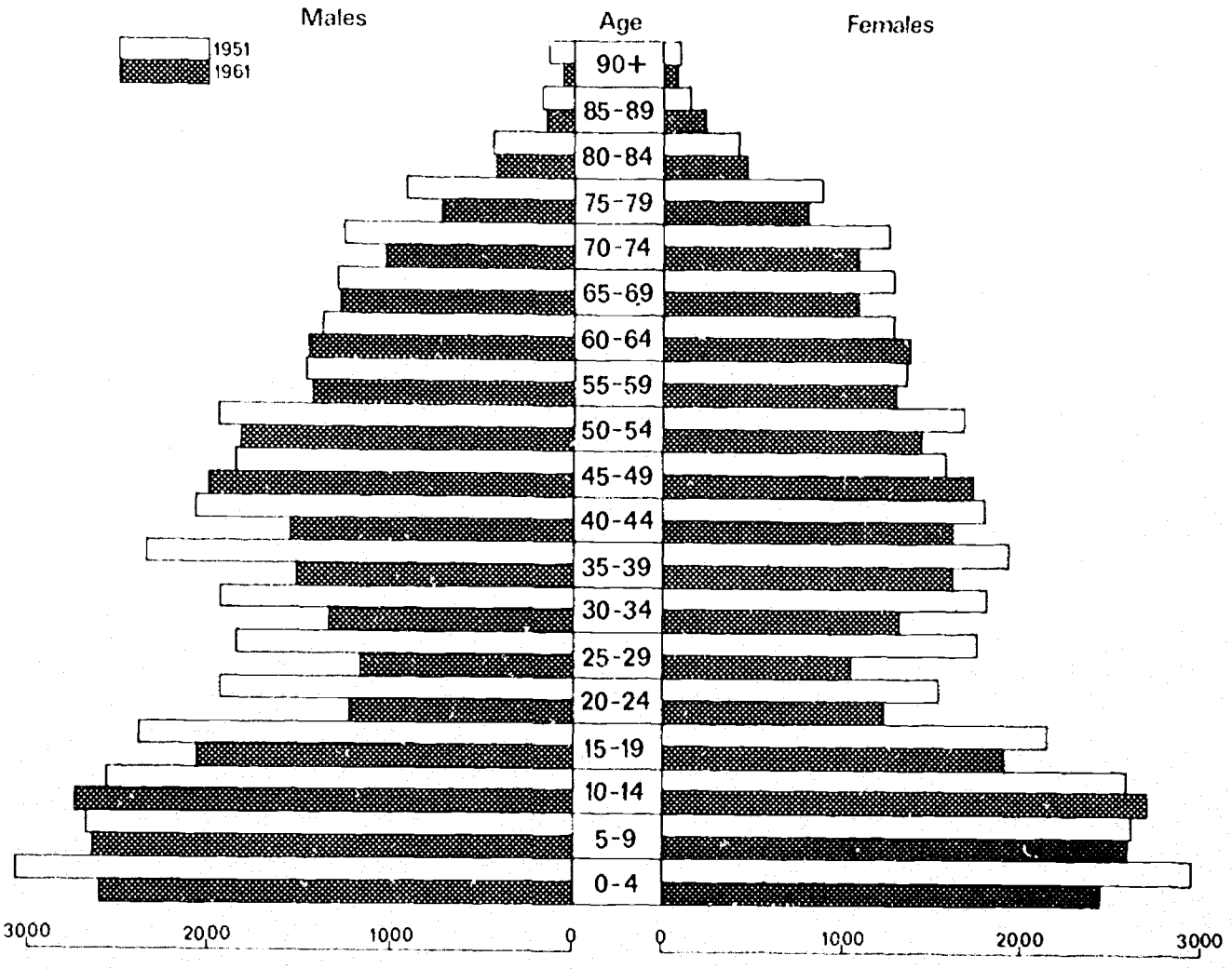


FIGURE I. *Structure of the population of County Sligo by age and sex, 1951 and 1961*
SOURCE: Sligo County Council, *Development plan*, Sligo, 1967

TABLE 1. Population change and urbanization in County Sligo and in Ireland[1] from 1926 to 1971

Year	Ireland		County Sligo		Sligo Town		Urbanization		
	Number	% change	Number	% change	Number	% change	Ireland (%)	Co. Sligo (%)	Excluding Sligo Town (%)
1926	2 972 000	– 5.4	71 388	– 9.7	11 437	+ 2.5	38.9	21.5	6.5
1936	2 968 000	– 0.1	67 447	– 5.5	12 565	+ 9.9	42.7	24.7	7.5
1946	2 955 000	– 0.5	62 375	– 7.5	12 920	+ 2.8	45.0	27.9	9.0
1951	2 961 000	+ 0.2	59 972	– 3.8	13 529	+ 4.7	48.4	31.4	13.8
1956	2 898 000	– 2.1	56 850	– 5.2	12 947	– 4.3	53.1	33.5	14.1
1961	2 818 000	– 2.8	53 561	– 5.8	13 145	+ 1.5	55.4	35.7	14.7
1966	2 884 000	+ 2.3	51 263	– 4.3	13 424	+ 2.1	49.2	37.7	15.5
1971	2 966 000	+ 2.9	50 236	– 2.0	14 071	+ 4.8	...	...	...

1. Excluding Northern Ireland.
SOURCE *Census of the population of Ireland, 1966*, Vol. 1, op. cit.
Census of the population of Ireland, 1971. Preliminary report, op. cit.

TABLE 2. Index of 1961–66 migration percentage change (of 1961 figure) County Sligo catchment areas for school age-groups

CA	Age-group 5–9		Age-group 10–14		Age-group 15–19	
	M	F	M	F	M	F
ST	+ 2.40	+ 3.83	– 5.12	+ 5.14	– 16.15	– 1.86
BM	– 7.55	– 0.54	—	– 7.79	– 22.12	– 34.72
TC	– 6.00	– 2.45	– 3.90	– 3.86	– 18.13	– 22.58
EC	+ 5.59	+ 4.76	+ 1.09	– 1.22	– 19.37	– 17.75
EK	+ 1.56	+ 4.60	+ 1.44	– 3.22	– 14.34	– 24.14
BS	+ 1.42	+ 1.45	– 6.25	+ 3.62	– 15.00	– 20.74
GR	+ 2.50	– 1.33	+ 1.13	– 8.12	– 13.29	– 18.97
CL	+ 2.55	– 2.85	– 3.15	– 5.14	– 18.18	– 32.95
GT	– 2.14	– 1.47	+ 0.62	– 1.88	– 20.00	– 29.21

TABLE 3. First-level enrolment in the 10–14 age-group in County Sligo by catchment area, 1970/71

	10–11		11–12		12–13	13–14	14–15	Total
	M	F	M	F	M + F	M + F	M + F	M + F
ST[1]	266	120	223	132	190	59	7	997
BM	53	43	30	45	67	16	—	254
TC	64	62	75	60	110	27	3	401
EC	23	21	23	24	36	12	1	140
EK	41	48	39	28	68	25	4	253
BS	27	34	45	23	35	8	2	174
GR	24	33	40	26	35	19	—	177
CL	38	48	41	38	51	8	2	226
GT	24	16	21	24	31	12	1	129
TOTAL	560	425	537	400				
GRAND TOTAL	985		937		623	186	20	2 751

1. For the meaning of the catchment area codes, see footnote 1, page 22.

TABLE 4. First-level schools: relative age

Built	ST	BM	TC	EC	EK	BS	GR	CL	GT	Total
Pre-1900	6	5	8	4	4	4	2	5	2	40
1900–45	9	3	5	1	1	2	4	6	—	31
Post-1945	3	6	5	—	7	4	4	4	3	36
TOTAL	18	14	18	5	12	10	10	15	5	107

TABLE 5. Profile of first-level schools under seventy-five enrolment by catchment area, 1971

CA	School	1971 enrol	Village or town	Rural	Percentage change in population 1951–61	Percentage change in population 1961–66	School grounds (acres)	Classrooms: Trad	Classrooms: Pre-fab	Year built	Year extend	Year renov	Year consol	Piped water	Central heating	Percentage change in enrolment 1966–71
ST	Knocknarea	32	—	*	− 1.9	+ 3.0	0.5	2	—	1900	—	1942	—	—	—	26
	Lugnagall	36	—	*	− 4.5	− 6.0	0.7	2	—	1908	—	1967	—	—	—	12
	Rathcormac	40	—	*	− 11.6	− 1.3	1.0	2	—	1900	—	1952	—	*	O	− 5
	Calry	44	—	*	− 1.0	− 15.3	2.0	2	—	1920	—	—	—	*	O	26
	Sligo Town	49	*	—	− 3.0	+ 4.8	1.0	2	—	1921	—	—	—	*	E	+ 32
	Sligo Town	51	*	—			1.0	2	—	1880	—	—	—	*	—	− 46
BM	Woodfield (P)	13	*	—	− 8.3	− 9.4	0.3	3	—	1900	—	—	—	*	—	28
	Leyney (P)	20	—	*	− 16.6	− 7.6	0.2	1	—	1900	—	1964	—	—	—	+ 5
	Carrowreagh	28	—	*	− 13.7	− 8.3	0.5	1	—	1900	—	—	—	—	—	+ 12
	Knockminna	29	—	*	− 11.6	− 4.6	0.5	2	—	1953	—	—	—	—	—	− 24
	Carrigans	30	—	*	− 13.0	− 2.5	0.7	2	—	1879	1940	—	—	*	—	− 6
	Buninadden	35	*	—	− 26.3	− 10.7	0.4	2	—	1900	—	—	—	*	—	− 33
	Ballinacarrow	49	*	—	− 11.6	− 4.6	1.0	2	—	1951	1971	—	—	—	—	− 17
	Culfadda	56	—	*	− 19.7	− 22.2	0.7	2	—	1954	—	—	1967	—	S	+ 10
	Keash	57	—	*	− 19.7	− 22.2	1.0	2	—	1965	—	—	1967	—	O	+ 42
	Lisaneena	60	—	*	− 16.6	− 7.6	1.5	2	—	1955	—	—	—	—	—	+ 5
	Ballymote	74	*	—	− 8.3	− 9.4	0.5	3	—	1915	—	—	1969	*	—	+ 19
TC	Tubbercurry (P)	9	*	—	− 14.8	− 0.3	0.1	1	—	1840	—	—	—	*	—	− 50
	Killoran	15	—	*	− 7.6	− 6.7	0.7	2	—	1909	—	—	—	—	—	− 56
	Benada (B)	23	—	*	− 14.3	− 14.2	2.0	2	—	1968	—	—	—	*	O	− 36
	Carniara	24	—	*	− 9.9	− 7.1	0.5	2	—	1900	—	—	—	—	—	− 27
	Doocastle	24	—	*	− 26.3	− 10.7	0.4	2	—	1931	—	—	—	—	—	− 25
	Cloonagh	26	—	*	− 23.6	− 12.7	0.2	4	—	1879	—	1960	—	—	—	− 19
	Drimina	37	—	*	− 14.3	− 14.2	0.5	2	—	1955	—	—	—	*	—	− 31
	Castlerock	48	—	*	− 24.0	− 18.8	0.5	3	—	1905	1962	—	—	*	E	− 19
	Carrowmore	54	—	*	− 18.5	− 19.8	0.5	2	—	1834	—	—	—	—	—	+ 15
	Rockfield	61	—	*	− 7.6	− 6.7	0.5	2	—	1902	—	—	1970	*	—	+ 3
	Achonry	66	—	*	− 11.6	− 10.2	0.7	2	—	1965	—	—	1968	—	O	+ 20
	Kilmactigue	71	—	*	− 23.3	− 15.6	0.2	4	—	1900	1930	1964	—	*	—	− 5
	Tubbercurry (B)	73	*	—	− 14.8	− 0.3	0.7	2	1	1966	1970	—	1969	*	O	+ 9
	Benada (G)	74	—	*	− 14.3	− 14.2	1.0	5	—	1953	—	—	—	*	E	− 22
EC	Kilglass	47	—	*	− 10.6	+ 0.5	0.4	2	—	1901	1949	—	—	*	E	− 19
	Stokane	52	—	*	− 18.3	− 4.8	0.5	2	—	1890	—	—	1969	—	—	+ 16
	Quigabar	61	—	*	− 10.6	+ 0.5	0.2	2	—	1880	—	—	—	—	E	− 12
EK	Skreen (P)	14	—	*	− 11.4	− 2.8	0.5	1	—	1899	—	—	—	—	—	− 22
	Leaffoney (P)	19	—	*	− 13.2	− 4.8	0.5	1	—	1900	—	—	—	—	—	+ 19
	Gortnamara	15	—	*	− 13.2	− 1.8	2.0	1	—	1950	—	—	—	—	—	− 32
	Kilrusheiter	42	—	*	− 25.2	− 3.8	0.7	2	—	1961	—	—	—	*	O	+ 24
	Easkey	49	—	*	− 13.0	− 7.3	0.6	2	—	1893	—	—	—	—	—	− 20
	Gleneaskey	49	—	*	− 22.3	− 13.0	0.5	2	—	1900	—	—	—	—	—	− 4
	Templeterrace	49	—	*	− 13.2	− 1.8	0.5	2	—	1962	—	—	—	—	—	− 18
	Culleens	53	—	*	− 13.2	− 4.8	1.0	2	—	1968	—	—	—	—	O	− 24
	Killeenduff	54	—	*	− 13.0	− 7.3	0.7	2	—	1965	—	—	—	—	O	− 8
	Owenbeg	72	—	*	− 13.2	− 4.8	0.5	—	3	1970	—	—	—	—	O	− 15

Continued

BS	Ballisodare (P)	17	*	—	1.1	4.4	0.2	2	—	1840	—	—	—	*	—	23
	Collooney (P)	18	*	—	5.9	0.8	0.5	2	—	1850	—	—	—	*	—	+ 6
	Collooney	22	*	—	5.9	0.8	0.5	2	—	1940	—	—	—	—	—	4
	Dromard	27	—	*	14.8	18.5	0.5	2	—	1898	—	—	—	—	—	23
	Killmacowen	38	—	*	3.3	0.7	0.5	2	—	1898	—	1964	—	—	S	5
	Ballylig	57	—	*	7.0	6.3	0.5	2	—	1953	1965	—	1970	—	—	25
GR	Mullaghmore	19	*	—	26.6	3.8	0.2	2	—	1895	—	—	—	*	—	+ 5
	Drummons	25	—	*	12.0	13.7	1.0	2	—	1900	—	—	—	*	—	—
	Carns	29	—	*	18.9	6.7	1.0	2	—	1951	—	1965	—	*	—	31
	Ballintrillick	31	—	*	10.5	9.5	1.0	2	—	1958	—	—	—	—	—	8
	Carney	32	*	—	9.6	+ 13.1	1.0	2	—	1940	—	—	—	—	—	35
	Derrylahan	42	—	*	21.8	+ 0.3	1.0	2	—	1934	—	1968	—	—	—	16
	Castelgal	45	—	*	26.6	3.8	1.0	2	—	1950	—	—	—	—	—	+ 10
	Cliffony	46	*	—	26.6	3.8	1.0	4	—	1914	—	—	—	*	—	15
CL	Mount-town	18	—	*	3.9	3.0	0.5	2	—	1889	—	—	—	—	—	5
	Knockalassa	20	—	*	15.3	5.8	0.2	2	—	1889	—	—	—	—	—	+ 25
	Bloomfield	26	—	*	22.0	10.5	1.0	2	—	1947	—	—	—	—	—	19
	Lackagh	27	—	*	22.2	0.9	2.0	2	—	1938	—	—	—	—	—	16
	Kilross	27	—	*	17.0	+ 1.1	0.5	2	—	1919	—	—	—	—	—	25
	Riverstown (P)	29	*	—	22.2	0.9	0.5	2	—	1899	—	—	—	*	E	+ 123
	Coolbock	29	—	*	13.8	4.8	0.2	2	—	1928	—	—	—	—	E	28
	Highwood	30	—	*	5.2	15.8	1.0	2	—	1898	—	—	—	—	—	12
	Ballindoon	36	—	*	5.2	15.8	0.2	2	—	1915	—	—	—	—	—	10
	Sooey	50	—	*	22.0	10.5	1.0	2	—	1956	—	—	—	—	—	+ 22
	Gleann	51	—	*	23.5	4.0	0.5	2	—	1959	—	—	—	—	—	+ 59
	St. James' Well	52	—	*	5.2	15.8	0.2	2	—	1893	—	—	—	—	E	10
	Geevagh	59	—	*	23.5	4.0	3.5	3	—	1930	—	—	—	—	O	17
GT	Cloonloo	29	—	*	19.1	12.8	0.1	2	—	1964	—	—	1969	—	O	9
	Annaghmore	51	—	*	29.9	10.8	1.0	2	—	1885	—	1963	—	—	E	31
	Gorteen	55	*	—	29.9	10.8	0.1	2	—	1885	—	1960	1969	—	—	+ 8
	Killaville	61	—	*	23.3	5.3	0.2	2	—	1885	1969	—	1969	—	—	+ 7

* = yes, O = oil, E = electrical, S = solid fuel, P = protestant, B = boys, G = girls

TABLE 6. Profile of first-level schools over seventy-five enrolment by catchment area, 1971

CA	School	1971 enrol.	Village or town	Rural	Percentage change in population 1951–61	Percentage change in population 1961–66	School grounds (acres)	Classrooms Trad.	Classrooms Pre fab.	Year built	Year extend.	Year renov.	Year consol.	Piped water	Central heating	Percentage change in enrolment 1966–71
ST	Rosses Point	89	*	—	− 9.6	+13.1	3	2	—	1905	—	—	—	*	C	+ 39
	ST (G)	112	*	—	− 3.0	+ 4.8	3	4	—	1930	—	—	—	*	C	− 16
	Strandhill	112	*	—	− 1.9	+ 3.0	1	2	1	1930	1967	—	—	*	—	+ 23
	ST (B)	114	*	—	− 9.6	+13.1	2	4	—	1930	—	—	—	*	O	− 14
	Carraroe	115	—	*	− 9.6	+13.1	2	3	—	1962	—	—	—	*	O	+ 32
	Dunally	112	—	*	− 1.0	−15.3	2.5	2	1	1905	1969	—	—	*	O	+ 29
	ST (P)	140	*	—			1	3	1	1863	1971	—	1968	*	—	+ 23
	ST (G)	216	*	—			4	6	—	1860	—	1965	—	*	O	+ 2
	ST (B)	354	*	—	− 3.0	+ 4.8	2	8	—	1900	—	1945	—	*	O	− 5
	ST (B)	513	*	—			8	12	1	1944	—	—	—	*	E	− 11
	ST (G)	534	*	—			4	10	—	1966	—	—	—	*	O	+ 14
	ST (G)	583	*	—			4	16	—	1964	—	—	—	*	E	− 2
BM	BM (G)	94	*	—	− 8.3	− 9.4	0.6	3	—	1915	1951	—	—	*	O	+ 16
	Cloghogue	94	—	*	−15.3	− 5.8	0.5	2	1	1950	1969	—	1968	—	E	+ 88
	BM (BG)	111	*	—	− 8.3	− 9.4	0.6	3	—	1915	1951	—	—	*	O	+ 32
TC	Moylough	76	—	*	−14.8	− 0.1	0.5	5	—	1890	1926	1963	—	—	—	− 23
	Cloonacool	104	—	*	−18.5	−19.8	0.5	2	2	1895	1968	—	1968	*	O	+215
	Curry	107	*	—	−14.8	− 0.1	0.7	7	—	1880	1922	—	1969	—	—	+ 51
	TC (BG)	152	*	—	−14.8	− 0.1	1.0	6	—	1913	—	—	—	*	E	− 5
EC	Corballa	86	—	*	−18.3	− 4.8	2.0	4	—	1882	—	1959	1968	—	—	+ 10
	EC (BG)	135	*	—	−10.6	− 0.5	0.2	4	—	1890	—	1940	1968	*	O	+ 81
EK	Dromore West	89	—	*	−14.9	− 7.6	0.5	4	—	1963	—	—	—	*	—	− 12
	Rathlee	98	—	*	− 7.4	− 8.1	0.5	3	—	1924	—	1970	1970	—	—	+ 7
BS	Collooney (G)	78	*	—	− 5.9	− 0.8	0.5	3	—	1930	—	—	—	*	O	+ 7
	Collooney (B)	85	*	—			1.0	3	1	1958	1970	—	—	*	O	+ 18
	High Park	105	—	*	−14.5	−18.5	0.7	2	2	1963	1970	—	1969	—	—	+453
	BS	123	*	—	− 1.1	− 4.4	0.5	3	1	1962	—	—	1968	*	O	+ 22
GR	Ballyweelin	83	—	*	−27.8	−11.3	0.5	4	—	1937	—	—	1968	*	E	+ 38
	Grange	105	*	—	−24.8	− 5.7	1.0	3	1	1962	1970	—	1968	*	E	+114
CL	Ballintogher	121	*	—	−22.0	−10.5	1.0	4	—	1970	—	—	1970	—	E	+108
	Riverstown	86	*	—	−22.0	− 0.9	1.0	3	—	1929	—	—	—	*	—	− 2
GT	Mullaghroe	90	—	*	−29.9	−10.8	0.5	3	—	1956	1969	—	...	—	—	...

* = yes, O = oil, E = electrical, S = solid fuel, P = protestant

TABLE 7. Profile of first-level schools of thirty to seventy-five enrolment in 1971 which might remain if one-teacher school idea accepted

CA	School	1971 enrol.	Rural	Percentage change in population		School grounds	Classrooms		Year				Piped water	Central heating	Percentage change in enrolment
				1951–61	1961–66	(acres)	Trad.	Pre-fab.	built	extend.	renov.	consol.[1]			1966–71
ST	Knocknarea	32	*	−0.19	+0.6	0.5	2	—	1900	1942	—	—	—	—	−26
	Lugnagall	36	*	−0.45	−1.2	0.7	2	—	1908	—	1967	—	—	—	−12
	Calry	44	*	−0.10	−3.0	2.0	2	—	1920	—	—	—	*	O	−26
BM	Keash	57	*	−1.97	−4.4	1.0	2	—	1965	—	—	1967	—	O	+42
	Lisaneena	60	*	−1.66	−1.5	1.5	2	—	1955	—	—	—	—	—	+ 5
TC	Castlerock	48	*	−2.4	−3.8	0.5	3	—	1905	1962	—	—	*	E	−19
	Drimina	37	*	−1.4	−2.8	0.5	2	—	1955	—	—	—	*	—	−31
	Carrowmore	54	*	−1.8	−3.9	0.5	2	—	1834	—	—	—	—	—	+15
	Achonry	66	*	−1.2	−2.0	0.7	2	—	1965	—	—	1968	—	O	+20
EC	Kilglass	47	*	−1.1	+0.1	0.4	2	—	1901	1949	—	—	*	E	−19
	Stokane	52	*	−1.8	−0.9	0.5	2	—	1890	—	—	1968	—	—	+16
EK	Culleens	53	*	−1.3	−0.9	1.0	2	—	1968	—	—	—	—	O	−24
	Gleneaskey	49	*	−2.2	−2.6	0.5	2	—	1900	—	—	—	—	—	− 4
	Killeenduff	54	*	−1.3	−1.5	0.7	2	—	1965	—	—	—	—	O	− 8
	Owenbeg	72	*	−1.3	−0.9	0.5	—	3	1970	—	—	—	—	O	−15
	Easkey	49	*	−1.3	−1.5	0.6	2	—	1893	—	—	—	—	—	−20
	Kilrusheiter	42	*	−2.5	−0.8	0.7	2	—	1961	—	—	—	*	O	+24
BS	Killmacowen	38	*	−0.3	−0.1	0.5	2	—	1898	—	1964	—	—	S	− 5
	Ballylig	57	*	−0.7	−1.3	0.5	2	—	1953	1965	—	1970	—	—	−25
GR	Carney	32	*	−0.9	+2.6	1.0	2	—	1940	—	—	—	—	—	−35
	Derrylahan	42	*	−2.2	+0.1	1.0	2	—	1934	—	1968	—	—	—	−16
	Castelgal	45	*	−2.7	−0.7	1.0	2	—	1950	—	—	—	—	—	+10
CL	St. James' Well	52	*	−0.5	−3.2	0.2	2	—	1893	—	—	—	—	E	−10
	Ballindoon	36	*	−0.5	−3.2	0.2	2	—	1915	—	—	—	—	—	−10
GT	Killaville	61	*	−2.3	−1.1	0.2	2	—	1885	1969	—	1969	—	—	+ 7
	Annaghmore	51	*	−2.9	−2.2	1.0	2	—	1885	—	1963	—	—	E	−31

1. Increased enrolment in these cases is due to amalgamation with other schools
* = yes; E = electrical; O = oil; S = solid fuel

TABLE 8. Profile of first-level schools between 75–110 enrolment, 1971, to be kept under review

CA	School	1971 enrol	Village or town	Rural	Percentage change in population 1951–61	Percentage change in population 1961–66	School grounds (acres)	Classrooms: Trad.	Classrooms: Pre-fab.	Year built	Year extend.	Year renov.	Year consol.	Piped water	Central heating	Percentage change in enrolment 1966–71
ST	Rosses Point	89	*	—	0.1	+ 2.6	3.0	2	—	1905	—	—	—	*	O	+ 39
BM	BM (G)	94	*	—	0.8	1.9	0.6	3	—	1915	1951	—	—	*	O	+ 16
	Cloghogue	94	—	*	1.5	1.2	0.5	2	1	1950	1969	—	1968	—	E	+ 88
TC	Moylough	76	—	*	1.5	0.02	0.5	5	—	1890	1926	1963	—	—	—	23
	Cloonacool	104	—	*	1.9	3.9	0.5	2	2	1895	1968	—	1968	*	O	+ 215
	Curry	107	*	—	1.5	0.02	0.7	7	—	1880	1922	—	1969	—	—	+ 51
EC	Corballa	86	—	*	1.8	0.9	2.0	4	—	1882	—	1959	1968	—	—	+ 10
EK	Dromore West	98	—	*	1.5	1.5	0.5	4	—	1963	—	—	—	*	—	12
	Rathlee	98	—	*	0.7	1.6	0.5	3	—	1924	—	1970	1970	—	—	+ 7
BS	Collooney (G)	78	*	—	0.6	0.2	0.5	3	—	1930	—	—	—	*	O	+ 7
	Collooney (B)	85	*	—	0.6	0.2	1.0	3	1	1958	1970	—	—	*	O	+ 18
	High Park	105	—	*	1.4	3.7	0.7	2	2	1963	1970	—	1969	—	—	+ 453
GR	Ballyweelin	83	—	*	2.8	2.2	0.5	4	—	1937	—	—	1968	*	E	+ 38
	Grange	105	*	—	2.5	1.1	1.0	3	1	1962	1970	—	1968	*	E	+ 114
CL	Riverstown	86	*	—	2.2	0.2	1.0	3	—	1929	—	—	—	*	—	2
GT	Mullaghroe	90	—	*	2.9	2.2	0.5	3	—	1956	1969	—	—	—	—	—

* = yes; E = electrical; O = oil

TABLE 9. Long-term development prospects of ST catchment area schools

CA	School		Town population 1961	Town population 1966	Percentage change 1961–66		Enrolm 1971	Consol. enrolm 1971 figs	Estmd enrolm 1976	Long-term prospect	Number of classrooms 1976
ST	ST(G)						583	583	572	+	16
	ST(G)						534	534	400	+	10
	ST(B)						513	513	463	+	13
	ST(B)						354	354	304	+	8
	ST(G)						216	216	176	+	6
	ST(P)	T	13 145	13 424	2.1		140	140	120		4
	ST(B)						114	114	100	+	4
	ST(G)						112	112	100	+	4
	ST						51	51	51		2
	ST						49	65	65		2
	Dunally	S				15.3	112	156	134	+	4
	Carraroe	S			13.1		115	134	112	+	4
	Rosses Point	S			13.1		89	89	100	+	3
	Strandhill	S			3.0		112	128	120	+	3
	Rathcormac	S				1.3	40	108	88	+	3

S = suburban, T = town, B = boys, G = girls, P = protestant.
ST to operate allocation of places to children by agreement in accordance with their home locations.
1. Pop. 1971: 14,021 + 4.8% from 1966.

TABLE 10. Long-term development prospects of schools (excluding ST)

CA	School		Town population 1961	Town population 1966	Percentage change 1961-66 +	Percentage change 1961-66 −	Enrol 1971	Consol enrol (1971)	Estm. enrol 1976	Long-term prospect +	Long-term prospect −	Schl. size 1976 (rooms)	Long-term prospect +	Long-term prospect −
BM	BM(BG)	T	964	921		4.5	111	111	85	+		3	3+	
	BM(G)						94	137	109	+		3	3+	
	BM(B)						74	118	92	+		3	3+	
	Ballinacarrow	V				4.6	49	109	79	+		3	3+	
	Buninadden	V				10.7	35	120	90		–	3		2
	Cloghogue	R				5.8	94	94	64		–	3		2
	Culfadda	R				22.2	56	113	80		–	3		2
TC	TC(BG)	T	878	937	6.7		152	152	170	+		4	4+	
	TC(B)						73	92	110	+		4	4+	
	Curry	V	118	116		1.7	107	133	152	+		4	4+	
	Achonry	R				10.2	66	144	161		–	3		3
	Benada	R				14.2	74	164	183		–	4		4
	Moylough	R				0.1	76	76	95		–	2		2
	Rockfield	R				6.7	61	76	95		–	2		2
	Cloonacool	R				19.8	104	104	123		–	3		2
	Kilmactigue	R				15.6	71	71	90		–	2		2
EC	EC	T	533	553	3.8		135	135	151	+		4	4+	
	Quigabar	R			0.5		61	108	125	+		3	3+	
	Corballa	R				4.8	86	165	182		–	4		4
EK	Easkey	V	317	283		10.7	49	175	202		–	4		4
	Dromore West	V	99	97		2.0	89	179	206		–	4		4
	Rathlee	R				8.1	98	98	125		–	2		2
	Templeterrace	R				1.8	49	91	118		–	2		2
	Leaffoney (P)	R				4.8	19	19	20		–	2		2
BS	BS	T	529	500		5.5	123	142	118	+		4	4+	
	Collooney (B)	T	553	540		2.4	85	109	85	+		3	3+	
	Collooney (G)						78	103	89	+		3	3+	
	Collooney (P)						18	109	108		–	3		3
	High Park	R				18.5	105	189	165		–	4		3
GR	GR	V	101	96		5.0	105	105	102	+		3		3
	Cliffony	V	82	71		13.4	46	110	109		–	3		3
	Ballintrillick	R				9.5	31	98	97		–	3		2
	Ballyweelin	R				11.3	83	83	82		–	3		2
CL	Riverstown	V	203	222	9.4		86	135	105	+		4	4+	
	Ballintogher	V	120	132	10.0		121	148	117	+		4	4+	
	Geevagh	R				4.0	59	94	63		–	3		3
	Gleann	R				4.0	51	86	55		–	2		2
	Sooey	R				10.5	50	76	45		–	2		2
	Highwood	R				15.8	30	111	80		–	2		2
GT	GT	V	220	206		6.4	55	106	119		–	3		3
	Mullaghroe	R				10.8	90	90	102		–	3		2

T = town, V = village, R = rural, (Town = 500+).
B = boys; G = girls; P = protestant.

TABLE 11. Physical facilities at all second-level schools, 1970/71

			Teaching space									Teaching equipment															
			General		Special			Other																Major games		Tarmac minor games courts	
CA	School	Grounds (acres)	Trad.	Pre-fab.	Sci.	Work-shop	Lang. lab	Gym	Lib.	Total rooms	Total classes	Rented 1970/71	TV	Over proj.	Tape	Epid. scope	Dict.	Dupl.	Strip proj.	Cine proj.	Cine cam.	Rec. play	Admin. facil.	Own near	Rent. dist.		Parking
ST	Summerhill	...	...	...	...	...	...	...[1]	...	...	...	...	...[2]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ursuline	25	14	9	2	2	1	—	1	29	15	—	2	1	4	1	—	1	1	1	1	4	A	2	—	10	*
	Mercy	4	19	—	3	1	—	1	—	24	17	—	2	1	4	1	1	1	1	—	—	1	A	—	—	2	—
	Gramm. Sch.	10	9	—	3	—	—	—	1	13	10	1	2	—	1	—	—	1	1	—	—	1	A	2	—	2	—
	Voc. Sch.	10	9	—	4	6	1	—	1	21	17	—	1	3	2	1	2	1	2	1	—	2	A	2	—	2	*
BM	Mercy	30	5	—	1	1	—	—	—	7	6	1	1	1	2	1	—	1	2	—	—	1	I	1	—	2	*
	Voc. Sch.	1	2	—	2	2	—	1	—	7	11	2	1	1	1	1	(1)[3]	1	1	(1)	—	—	I	—	*	1	—
TC	Marist	40	5	2	3	1	—	1	1	13	11	—	2	1	2	—	—	1	1	1	—	2	I	2	—	10	*
	Voc. Sch.[4]	12½	3	—	2	2	—	1	—	8	10	2	1	1	1	—	(1)	1	1	(1)	—	1	I	1	—	1	—
	Benada	10	9	1	2	—	1	1	1	15	9	—	1	1	1	—	—	1	1	1	—	1	I	3	—	3	*
EC	Convent	2	6	—	2	2	1	—	1	12	10	—	1	—	1	—	—	1	1	1	—		I	—	*	—	—
EK	Voc. Sch.[4]	13	3	—	2	2	—	1	—	8	12	2	1	1	1	—	(1)	1	1	(1)	—	1	I	3	—	1	—
BS	Mercy	½	4	4	2	1	—	—	—	11	8	—	1	1	1	1	—	1	1	1	—	1	I	—	*	1	—
GR	Voc. Sch.	8	2	—	2	2	—	1	—	7	7	—	1	1	1	—	(1)	1	1	(1)	—	—	I	2	—	1	—
CL	Voc. Sch.	5½	2	2	2	2	—	1	—	9	9	—	1	1	1	—	(1)	1	1	(1)	—	—	I	2	—	2	*
GT	Voc. Sch.	5½	1	—	2	1	—	1	—	5	8	6	1	1	2	—	(1)	1	1	(1)	—	—	I	1	—	1	*

A = adequate, I = inadequate, * = yes, ... = data not available.
1. Heated swimming pool at Summerhill.
2. Closed-circuit TV at Summerhill.
3. Brackets indicate shared equipment.
4. Ten acres acquired in town to build new schools at TC and EK.

Appendix II. Second-level accommodation standards

The Development Branch and the Post-primary Building Unit of the Department of Education combine efforts in decision-making on the location and extension of schools, the former dealing mainly with planning policy and the latter with standardization, control and implementation.

The present policy aims at creating schools of 400–800 enrolment through new development or rationalization; the minimum enrolment limit is 150. Strict limits on site area are not defined but there is an awareness of the need to provide a tarmac area for parking and minor games, and fields for environmental studies and recreation.

Area and cost limits in operation are given in the following table.

TABLE 1. Area and cost limits, 1970–71

	Enrolment up to 275		Larger schools	
	Sq ft	Percentage	Sq ft	Percentage
Teaching area	26.10	65.2	43	65.2
Circulation area	5.42	13.6	9	13.6
Other ancillary area	8.48	21.2	14	21.2
Total pupil place	40.00	100.0	66	100.0
Cost limit per pupil place	£160 (system built)			
Student place	£220 (trad. built)		£363 (trad. built)	

Thus, the cost limit is £4 for system and £5.50 for traditional building per sq. ft. The norm for accommodation breakdown for the school of 500 enrolment is as follows:

Teaching area		*Sq. ft.*
General classrooms		7 200
Geography and languages	1 200	7 200
Other special rooms	6 000	
Assembly hall/gymnasium		2 800
General purpose		1 600
Library and individual work		2 200
Guidance suite (Educational and careers)		500
		21 500

The maximum class size recommended is thirty, and the average twenty-five. The minimum pupil/teacher ratio is 17.5:1.

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The authors

Jacques Hallak is a staff member of the IIEP and Director of the research project on planning the location of schools. His previous publications include *The analysis of educational costs and expenditure* (1969), and *Financing and educational policy in Sri Lanka (Ceylon)* (1972). He is also co-author of monographs on the financial aspects of education in certain African countries (1966) and in Iran (1972) and co-author of *Managing educational costs* (1972).

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