An t-Údarás um Ard - Oideachas The Higher Education Authority

WHO GOES TO COLLEGE?

A SECOND NATIONAL SURVEY

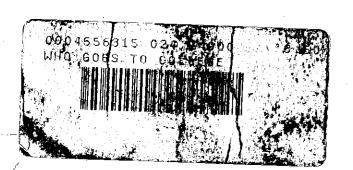
OF PARTICIPATION

IN

HIGHER EDUCATION

by

Patrick Clancy



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Foreword

The study now being published by the Authority has two very useful outcomes. It amplifies the data published annually on students by the Department of Education in Tuarascail Staitistiuil and by the Authority in its annual publication of Student Statistics. It encompasses the third-level system as a whole and hence gives a comprehensive picture, regardless of administrative or institutional differences in the arrangements for higher education.

This is the second study of this type published by the Authority. Its usefulness to administrators, commentators and researchers is enhanced by the comparability of the data between the two studies. The distance in time between them - 1980 and 1986 entrants - is suitable. The period is not so long as to alter the context in which both studies have taken place. Public expenditure policy in Ireland, and in particular in relation to education, has a major impact on well-established trends affecting the participation rate in higher education. A third survey of this kind would be due in 1992, a year of particular significance in connection with the application of the provisions of the Single European Act.

In a study primarily of participation in higher education it is gratifying to note that in the period between the two surveys the participation rate in higher education has increased from a fifth to a quarter of the age cohort. As a corollary, differences in male and female participation rates have been narrowed appreciably in nearly all fields of study, and educational attainment levels to obtain entry to higher education institutions of all kinds have further advanced, in some cases dramatically.

The new survey permitted the extension of the range of data collected. In this regard the study includes data on the numbers of students with financial support under the various schemes provided under the aegis of the State for this purpose. Such data will be of considerable value in monitoring the effects of the schemes and the extent to which their aims are being achieved.

A survey of this kind depends greatly on the quality of the data collection, and Dr.Clancy is to be congratulated on the painstaking care which he has taken in this regard. His ability to work with the authorities and staff of the various institutions contributed greatly to the excellence of the presentation and the confidence which can be reposed in the data. The heads of the various institutions have as always been extremely co-operative in this matter: the registrars and staff involved in the admission of students have done an enormous amount of work to facilitate the compilation of data. Officers of the Department of Education have been most helpful and responsive, as also have been the Secretary and staff of the Central Applications Office for University and Higher Education institutions. The Authority's Development and Promotion Committee, under the chairmanship of Mr. P.L. Colgan, Registrar, NIHE,L acted as a steering committee in connection with the initiation of the survey. The Authority is also pleased that members of its Secretariat were so actively involved in the study.

The statistical analysis of the data and the conclusions drawn from it are, of course, the responsibility of Dr.Clancy. The Authority congratulates him on a splendid and important study and commends the report to all concerned. For its part, the Authority will be considering what actions may be considered desirable in the light of the findings and advising the Minister for Education accordingly.

I wish to congratulate all concerned, and especially Dr.Clancy, on this study.

L. O Laidhin,

CHAIRMAN.

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INTRODUCTION

The aim of this study is to examine the pattern of participation in higher education in Ireland. The report is based on a national survey of all those who enrolled for the first time as full-time higher education students in Autumn 1986. The research is primarily a replication of Participation in Higher Education (1) which was based on an analysis of the 1980 entry cohort. The report is divided into five sections. This introductory section describes the scope of the survey and the research methods used. In addition, to help place the study in context, it presents a brief description of the expansion and diversification of higher education in Ireland in recent decades. The second section of the report describes the main characteristics of the new entrants and examines their distribution between colleges and fields of study. The third section of the report examines participation rates in higher education in Ireland. National and county rates of admission to higher education are analysed. In the fourth section a number of correlates of differential admission rates to higher education are examined. The main objective in this section is to attempt to explain differential rates of admission to higher education by county. The final section of the report summarises the main findings of the research and explores some of the implications of the findings.

Expansion and diversification of higher education

One of the most striking features of social change in Ireland over recent decades has been the rapid expansion in educational provision. Since the 1960s the growth in educational enrolments at second and third level has been explicitly linked to the economic and social transformation of Irish society. The publication, in 1966, of Investment in Education (2) marked a reorientation in educational policy towards a concern with the labour market needs of a developing economy. However, the rapid expansion of higher education had commenced prior to the 1960s, although there is some difficulty in quantifying precisely the growth rate prior to 1964. Because of an absence of published statistics on enrolments in Professional and Technological Colleges the estimates of the pattern of growth prior to the mid 1960s are based only on enrolments in the universities, the colleges of education and the National College of Art. Notwithstanding this limitation Table 1 reveals the general pattern of growth. Since the mid 1950s the percentage growth in enrolments in full-time higher education ranges from 26% to 39% for each five year period.

PERCENTAGE INCREASE IN HIGHER EDUCATION ENROLMENT IN IRELAND **OVER FIVE-YEAR PERIODS 1950 - 1985** Period 1950-55 1955-60 1960-65 1965-70 1970-75 1975-80 1980-85 % Increase 8.0* 33.9* 38.2* 26.7 26.4 26.5 31.4 1950-1955; Development of Higher Education 1950-1967 Statistical Source: Survey, OECD, Paris, 1970: 1965-1980; Tuarascail Staitistiuil 1955/66 1970/71, 1975/76, 1980/81, Department of Education, Dublin, The Stationery Office: 1985 Report, Accounts (1985/86) and Student Statistics 1985/86, Higher Education Authority, Dublin, 1987.

TABLE 1

* Estimate based on enrolments in the universities and colleges of education.

In common with other higher education systems (3) this numerical expansion has been accompanied by a diversification and structural change in the system. Until the late 1960s the system was dominated by the university sector which, as recently as 1969, accounted for 78% of total higher education enrolments. By 1985 this percentage had declined to 50%. The main features of this diversification has been the establishment in the 1970s of nine Regional Technical Colleges and the expansion of the existing Technological Colleges in Dublin and Limerick. The RTCs were designed primarily to provide short-cycle courses with a strong vocational emphasis. The system was diversified further with the establishment of

National Institutes for Higher Education in Limerick_(1972) and Dublin (1980). These Colleges were developed to provide technological education at a higher level than that offered by the RTCs.

Scope of the survey

The study was confined to those who enrolled for the first time as undergraduates in the first year of study as full-time students in higher education in the Republic of Ireland in Autumn 1986. For the purpose of the study higher education was defined as consisting of all courses of study which demand as a minimum entry requirement a Leaving Certificate with at least a Grade D in five subjects. This delineation of higher education corresponds to that which was used in the earlier study. Perhaps the most notable exclusion from the survey is that of students who enrolled in theological colleges or seminaries. While it is clear that these students are part of the third-level sector and thus should be included in calculation of overall participation rates, it is felt that the pattern of recruitment of these colleges is not a matter for public policy and thus falls outside the scope of the present research.

It is possible to estimate the number of new entrants to higher education in seminaries and other religious colleges who were excluded from the study. The pattern of recruitment to these colleges is monitored annually by the Council for Research and Development of the Catholic Church (3). The largest single category excluded is the 102 new entrants to higher education at the Pontifical University, St. Patrick's College, Maynooth. There were, in addition, a further 84 new entrants preparing for the diocesan priesthood at seminaries in Clonliffe College and All Hallows College in Dublin and in colleges in Carlow, Thurles, Kilkenny, Waterford, Wexford and Kiltegan. This total of 186 needs to be reduced by at least 10 to take account of those students who previously had third-level education at another college. Finally, we need to take account of those students who entered the Clerical Religious Orders. It is estimated that 25% of this cohort of 129 would be receiving their third-level education within their own colleges and, thus, should be added to the total. This leaves an estimated total of 208 new entrants to higher education who are excluded from the present study.

As in the case of the 1980 survey the focus of this study is on "new entrants" in the first year of an undergraduate programme. Repeat students or students who were previously enrolled in higher education on another programme were not included in the main study. One of the implications of this classification is illustrated in Table 2 which, in addition to showing the new entrants who are the focus of this study, also reports the number of first year students in each of the colleges. It is observed that, while the number of new entrants to higher education in 1986 was 17,159, the total number of registered students in the first year of third-level study was 18,704. The difference of 1,545 is represented by students who are either repeating the same first year programme or transfer students from another course in the same college or in another college.

It is clear from Table 2 that the difference between the number of first year students and the number of new entrants to higher education is largest in the university sector where 13% of first year students were repeat or transfer students. The percentage is lowest (2%) in the colleges of education, while in the RTCs, 4% of the first year enrolment is made up of students who had some previous third-level education. Overall, repeat or transfer students constitute more than 8% of the first year enrolment. Table A1 (Appendix A) shows the distribution of these students differentiating between present college type and previous college type. It is observed that 56% of these students had previously studied at the same college and were, in 1986, either repeating the same programme or transfer students from another course in the same college. This pattern is most pronounced in the university sector where 62% of first year students with some previous third-level education were still in the same college, while a further 20% had previously studied at another university. In the Regional Technical Colleges half of those first year students with previous third-level education were still in the same college, 17% had previously been at a university, while a further 13% had previously studied at another RTC.

Data collection

The study was based on a analysis of personal, demographic and educational data which were

abstracted from individual student record forms. Access to this information was granted following contact with the principal and/or registrar of each college. Assurances of the strictest confidentiality were given: the names of students would not be recorded, thus, it would be impossible to link any information with the identity of any individual student.

For the collection of information it was decided to adopt different strategies for the different colleges depending on whether admissions were channelled through the Central Applications Office. Twenty eight of the colleges - those not affiliated to the CAO - operated their own independent admissions procedures. In the case of these colleges it was proposed to abstract the required data directly from the enrolment forms of new entrants. In many of the colleges the computerisation of student records greatly facilitated this process. In the case of one college agreement was reached that each new entrant would be asked to fill out a short questionnaire prepared and administered by the researcher. The collection of data completed their enrolments for the year, thus avoiding the problem of duplication which could arise if a student enrolled initially in one college and subsequently transferred to another.

In the case of those Colleges where applications are channelled through the CAO a standard application form is completed by applicants. These data together with Leaving Certificate and other examination results when they become available are entered on computer file for processing. For the present study permission was granted by the Board of the CAO and by the registrars of the affiliated colleges to obtain access to these data. Each of the colleges provided a computer listing of the CAO number and some additional information for each new entrant commencing third-level education. By matching these I.D. numbers with the CAO master file it was possible to abstract most of the required data on all new entrants. However, since all colleges admit a small number of students directly without going through the CAO, it was necessary to approach the colleges directly for this information.

Irrespective of the data gathering strategy adopted the most time consuming task was the pursuit of missing data. Since the study aimed at complete coverage no effort was spared in an attempt to secure a complete data set for each new entrant. This required a sustained research effort over many months and was successful only because of the willing cooperation and forbearance of the admissions and student records staff of the colleges.

The personal, demographic and educational data collected as described above constitute the main source of data for the study. Two further sources of data are used. Demographic data on age, sex and socio-economic status of the population, by area, from the 1981 Census of Population are used as a basis for calculating rates of participation in higher education. Although results from the 1986 Census of Population on the age distribution have recently become available, the use of the 1981 data has been preferred for the purpose of this study. Because of the impact of internal migration and of emigration the use of the age distribution from the 1986 Census would be quite misleading for the calculation of national and county rates of participation. The final data source used in the study was supplied by the Department of Education. Enrolment figures in the final year of the post-primary cycle in 1985/86 were supplied by the Department of Education for each of the 809 post-primary schools in the country. Students in these classes formed the main target group from which the new higher education entrants in 1986 were drawn. In addition, aggregate enrolment data in all post-primary schools over a five year period were analysed in order to estimate the retention rate through the post-primary cycle of that age cohort which constituted the

This is a policy-oriented descriptive study of the pattern of participation in higher education in Ireland. Although the research is policy-oriented this report does not attempt to formulate any comprehensive recommendations for the future development of third level education. Its main function is to provide an information base for decision makers in Irish higher education. Since the report is written with a broad readership in mind the style of the report, like that of its predecessor, is, for the most part, non-technical and non-academic. The empirical analysis reported here does not exhaust the full potential of the data. It is envisaged that the results of further analysis will be published in academic journals.

TABLE 2

NUMBER OF FIRST YEAR STUDENTS AN BY SEX, COLLEC	GE AND CO	LLEGE 1	TYPE	ntrants	-	Total	
College	of 1st Year St.	M	Male		ale	_ lotal	
	N	N	%	N	%	N	
University Sector							
University College Dublin	2,661	1,188	51.3	1,129	48.7	2,317	
University College Cork	1,546	627	46.1	732	53.9	1,359	
University College Galway	1,086	443	46.0	519	54.0	962	
Trinity College Dublin	1,453	595	48.0	644	52.0	1,239	
St. Patrick's College, Maynooth	539	181	41.9	251	58.1	432	
Royal College of Surgeons in Ireland	128	81	66.9	40	33.1	121	
TOTAL	7,413	3,115	48.4	3,315	51,6	6,430	
National Institutes for Higher Education							
Limerick	687	450	70.2	191	29.8	641	
Dublin	548	270	53.4	236	46.6	506	
TOTAL	1,235	720	62.8	427	37.2	1,147	
Dublin Institute of Technology			_				
College of Technology, Bolton St.	508	402	84.8	72	15.2	474	
College of Technology, Kevin St.	506	313	65.3	166	34.7	479	
College of Commerce, Rathmines	451	231	54.5	193	45.5	424	
Dublin College of Catering, Cathal Brugha St.	467	86	19,3	360	80.7	446	
College of Marketing and Design, Mountjoy Sq.	416	180	47.9	196	52.1	376	
TOTAL	2,348	1,212	55.1	987	44.9	2,199	

TABLE 2 Cont'd.

College	Number of 1st Year St					Tota	
Regional Technical Colleges	N	N	%	N	%	N	
Athlone	624	345	55.9	272	44.1	61	
Carlow	813	488	63.0	287	37.0	77	
Cork	846	558	68.7	254	31.3	81	
Dundalk	572	316	58.2	227	41,8	54	
Galway	794	355	47.7	390	52,3	74	
Letterkenny	322	154	50.3	152	49.7	30	
COACT	664	396	62,3	240	37,7	630	
Sligo	471	232	52.0	214	48.0	44	
Tralee	317	158	51.1	151	48.9	30	
Waterford	969	511	55.0	418	45.0	929	
TOTAL	6,392	3,513	57.4	2.605	42.6	6,11	
Colleges of Education				 =/	<u> </u>	 -,	
St. Patrick's, Drumcondra	268	49	18.3	219	81.7	268	
Mary Immaculate, Limerick	249	41	16.5	207	83.5	248	
Thomond, Limerick	178	128	77.1	38	22.9	166	
3 Sion Hill Colleges **	102	6	6.3	90	93.7	96	
Mater Dei Institute	52	12	24.0	38	76.0	50	
St. Mary's, Marino	31	12	38.7	19	61.3	31	
Church of Ireland, Rathmines	29	3	10.3	26	89.7	29	
St. Angela's Sligo	28	0	0	28	100.0	28	
TOTAL	937	251	27.4	665	72.6	916	
Other Colleges	·						
National College of Art and Design	121	41	38,0	67	62.0	108	
Crawford College of Art and Design, Cork	70	13	19.4	54	80.6	67	
Oun Laoghaire School of Art and Design	88	42	54. 5	35	45.5	77	
College of Industrial Relations	63	41	66.1	21	33,9	62	
Shannon College of Hotel Management	37	16	45.7	19	54.3	35	
TOTAL	379	153	44.0	196	56.0	349	
TOTAL ALL COLLEGES	18,704	8,964	52.2	8,195	47.8	17,159	

^{*}The number of first year students differs from the number of new entrants because the former category includes those students who are repeating the first year programme and those who are transfer students from another course in the same college or in another college.

CHARACTERISTICS OF HIGHER EDUCATION ENTRANTS

Higher Education Colleges

A total of 17,159 new entrants were admitted to 36 colleges of higher education in the Republic of Ireland in Autumn 1986 (5). This enrolment represents an increase of 28% on the total for 1980. The number of colleges is one less than that included in the 1980 study. Carysfort College of Education did not have any new entrants in 1986 while the new entrants to the College of Occupational Therapy which were shown separately in the earlier study are now included in the total for Trinity College Dublin. Shannon College of Hotel Management is included for the first time in this study.

The distribution of the new entrants, by sex, to each of the 36 colleges is shown in Table 2. Thirty seven per cent of the new entrants were admitted to the university sector. Although the number of new entrants to this sector shows an increase of more than 17% on 1980, the sector continues to enrol a declining proportion of the total cohort. There were 916 new entrants to the Colleges of Education sector. This represents a reduction in enrolment of 22% on the 1980 figure. This reduction is accounted for mainly by the decision taken in relation to Carysfort.

In the report on the 1980 study all of the other colleges were, somewhat arbitrarily, combined to designate the technological sector. In this report it is proposed to disaggregate this sector, differentiating between the National Institutes of Higher Education (NIHEs), the Dublin Institute of Technology (DIT), the Regional Technical Colleges (RTCs) and a smaller group of 'other colleges' which includes three colleges of Art, the College of Industrial Relations and Shannon College of Hotel Management. The College of Art, Commerce and Technology, Limerick is combined with the RTCs in this analysis.

The RTC sector had a total of 6,118 new entrants, only 312 fewer than the university sector. New entrants to the RTCs constituted 36% of the total and show a growth of 52% since 1980. The five colleges of the Dublin Institute of Technology enrolled 2,199 new entrants, representing a growth of 40% since 1980, while the two NIHEs had 1,147 new entrants, showing a growth of 56% since 1980. This increase is represented mainly by the growth of the Dublin institute. The five remaining colleges had a total of 349 new entrants.

Table 2 also shows the sex composition of the student intake to each of the colleges. Overall, males constitute a majority (52%) of new entrants. This gender differential in participation rates is anomalous in view of the higher participation rates by females in the senior cycle of the post- primary sector. However, female participation rates in higher education are increasing at a faster rate than those of males. In 1980, 46% of the new entrants were female compared to 48% in the present study.

The distribution, by sex, varied by college. In contrast with the situation in 1980, females constituted the majority (52%) of the new entrants to the university sector in 1986. Female new entrants were more highly represented (58%) at St. Patrick's College Maynooth, while males were more highly represented (67%) in the Royal College of Surgeons. As in the earlier study, female students continue to constitute a large majority (73%) of new entrants to the Colleges of Education, while they are also in the majority in two of the colleges of art (the exception being Dunlaoghaire) and in the Shannon College of Hotel Management. Male students constituted a majority of new entrants to nine of the RTCs, the exception being Galway. They were also in the majority in the two NIHEs, in three of the colleges of the DIT and in the College of Industrial Relations.

Field of Study

In monitoring changes in higher education there is considerable interest in the changing distribution of students by field of study. In examining the distribution of students by field of study the earlier report utilised two established sets of categories which have been widely used. In the interest of comparability

the same set of categories will be used in this report. The HEA has developed a set of categories for use in its Annual Report and Student Statistics. These field of study categories will be used for the following HEA designated colleges: the universities, the National Institutes for Higher Education, the National College of Art and Design, the Royal College of Surgeons in Ireland and Thomond College. For the remaining colleges, described as non HEA designated, the field of study categories used are those defined by the Boards of Study of the National Council for Educational Awards. However, before examining the detailed breakdown of new entrants within these separate fields of study categories it is appropriate to start with a summary composite table which shows the field of study of all new entrants. (See Appendix B for detailed information on the classification of fields of study.)

Table 3 presents the distribution of all new entrants by field of study and by sex. For comparative purposes, the table also shows the overall distribution, by field of study, of the 1980 cohort together with the percentage change between 1980 and 1986. It is observed that, as was the case in 1980, Technology was the field of study of the largest percentage (25%) of new entrants in 1986. When this percentage is combined with that for Science (15%) and Agriculture (1.5%) it is noted that, in all, 41% of new entrants were enrolled in the combined fields of Science and Technology. This finding is identical to that from the 1980 survey. Following Technology, Commerce was the field of study which enrolled the next largest percentage (22%) of new entrants. Almost 16% of new entrants were enrolled in the Humanities while more

TABLE 3

Field of Study		1986 New	1980 New Entrants		% Change 1980-86		
	Males	Males Females TOTAL		то	TOTAL		
	%	%	N	%	N	%	%
Humanities	10.9	21.2	2,720	15.9	1,955	14.6	+39.1
Art & Design	2.4	5.7	683	4.0	506	3.8	+35.0
Science	12.9	16.6	2,531	14.8	1,898	14.2	+33.4
Agriculture	2.3	0.7	265	1.5	230	1.7	+15.2
Technology	40.4	7.6	4,240	24.7	3,364	25.2	+26.0
Medical Sciences	3.2	4.1	626	3.7	620	4.6	+ 1.0
Education	2.8	8.1	916	5.3	1,175	8.8	-22,0
Law	1.4	1.8	273	1.6	266	2.0	+ 2.6
Social Science	1,8	5.9	639	3.7	371	2.8	+72.2
Commerce	20,7	24.0	3,817	22,3	2,736	20.5	+39,5
Hotel, Catering & Tourism	1.2	4.2	449	2.6	239	1.8	+87.9
TOTAL %	100.0	100.0	-	100.0	-	100.0	+28.4
TOTAL N	8,964	8,195	17,159		13,360		

than 5% were enrolled in Education. This latter field of study shows a decline from almost 9% in 1980. Perhaps the most striking feature of Table 3 is the similarity between the percentage distribution by field of study in 1986 with that found in 1980. In spite of an increase in overall enrolment of 28% between 1980 and 1986, there has been little change in the disciplinary balance in the period. With the exception of education, which shows a decline of 22% in the number of new entrants, all other fields of study record an increase in enrolment between 1980 and 1986. Hotel, Catering and Tourism and Social Science record very large percentage increases of 88% and 72% respectively although both fields of study still enrol a relatively small percentage of total enrolments. The Humanities, Art and Design and Science all record percentage increases in enrolment larger than the overall percentage increase. In contrast Medical Sciences and Law show the lowest percentage increases at 1% and 2.6% respectively.

The distribution of students between these fields of study varied significantly by sex. The largest percentage (40%) of male new entrants were in the field of technology. In contrast, less than 8% of female new entrants were enrolled in technology, making this the most sex-typed field of study. The largest percentage (24%) of female new entrants enrolled in Commerce, a further 21% entered the Humanities and 16.6% enrolled in Science; the corresponding percentages of male new entrants in these fields of study were 21% in Commerce, 13% in Science and 11% in the Humanities. Significantly higher percentages of female new entrants enrolled in Hotel, Catering and Tourism, Social Science, Education and Art and Design, while a much higher percentage of male new entrants enrolled in Agriculture.

The foregoing composite table is based on an amalgamation of the data contained in the following two tables which describe, separately, the distribution of students by field of study for the HEA-designated and the non-HEA designated colleges. However, before examining these more detailed distributions it is appropriate to take account of some variability between colleges in the way different subject areas are classified. For example, Mathematics can be classified as a Science subject or as one of the Humanities; Computer Studies can be classified as part of Engineering, Science or Business Studies. Further anomalies arise specifically in relation to the classification of first year students. Students at University College Cork who take the B.Sc. Degree in Dairy Science are not differentiated from other science students in first year. Similarly, students who study Law at University College Galway are included in the total for Arts. Thus, in examining the distribution of students by field of study in the different colleges it is necessary to take account of these different classifications.

The distribution of new entrants, by field of study and sex, in the HEA designated colleges is shown in Table 4. Arts is the field of study which had the largest percentage (32.5%) of new entrants. Other fields of study in which a large percentage of new entrants enrolled were Science (17%) and Commerce and Engineering, both 13%. Almost 7% of new entrants were admitted to Medicine while the remainder were distributed amongst the other fields of study shown in Table 4.

The distribution of students between the different fields of study varied widely for males and females. Arts, Social Science and Communications and Information Studies attracted a disproportionate number of female students. In contrast, Engineering, Agricultural Science, Education (in Thomond College) and Commerce had a disproportionate number of male students. Science, Law, and Economic and Social Studies enrolled approximately equal proportions of male and female students. The gender differentials in the distribution of students by field of study in these colleges have not changed radically from that of the earlier study. Perhaps the most significant shift is evident in Medicine and Dentistry where females now constitute the majority. The distribution of students by field of study within each of the HEA designated colleges is shown in a separate table in the Appendix (Table A2).

The distribution of new entrants by field of study and sex for the non HEA designated institutions is shown in Table 5. The largest percentage of students (30%) was enrolled in Business, Administrative and Secretarial Studies. Almost 22% of students were enrolled in General Engineering with a further 7% in Construction Studies. Thirteen per cent of entrants were enrolled in Science with a further 8% in Education while Art and Design and Computer Studies each enrolled 6% of new entrants. Almost 5% of new entrants were enrolled in Hotel, Catering and Tourism, while a further 3% were enrolled in General Studies. This last category includes a diverse range of courses in Social Studies, Legal Studies, Journalism, Public Relations, Environmental Management and Music.

The distribution of students between these fields of study varied significantly by sex. The largest percentage (38%) of male new entrants enrolled in General Engineering, while only 3% of females entered this field of study. Construction Studies also revealed a large sex differential in favour of males, with 11.5% of male new entrants compared to only 2% of female new entrants. The largest percentage (35.5%) of female new entrants enrolled in Business, Administrative and Secretarial Studies, although this field of study is less sex-typed since it enrolled 25% of male new entrants. Other fields of study to reveal a large sex differential in favour of females were Education, General Studies, Hotel, Catering and Tourism, Art and Design and Science. Computer Studies was the field of study with the smallest sex differential in enrolment in these colleges. The distribution of students by field of study within each college in this sector is shown in a separate table in the Appendix (Table A3).

TABLE 4

FIELD OF STUDY OF NEW ENTRANTS, BY SEX, TO HEA-DESIGNATED COLLEGES								
Field of Study	IV.	Fe	male	TOTAL				
- Total of Ottaly	N,	%	N	%	N	%		
Arts	919	23,0	1,634	42.5	2,553	32.5		
Education	128	3.2	38	1.0	166	2.1		
Art and Design	41	1.0	67	1.7	108	1,4		
Social Science	14	0.3	101	2.6	115	1.5		
Economic and Social Studies	84	2.1	86	2.2	170	2.2		
European Studies	48	1,2	87	2.3	135	1.7		
Communications & Information Studies	28	0.7	117	3.0	145	1.9		
Commerce	609	15.2	423	11.0	1,032	13.2		
Law	111	2.8	106	2.8	:217	22.8		
Science	690	17.2	638	16.6	1,328	16.9		
Engineering	836	20.9	144	3.7	980	12,5		
Architecture	25	0.6	19	0.5	44	0.6		
Medicine	251	6.3	286	7.4	537	6.8		
Dentistry	33	0.8	44	1.1	7.7	1.0		
Veterinary Medicine	38	0.9	20	0.5	58	0,7		
Agricultural Science and Forestry	122	3.0	31	0.8	153	2.0		
Dairy Science	27	0.7	.6	0.2	33	0.4		
TOTALS	4,004	100.0	3,847	100.0	7,851	100.0		

TABLE 5

	FIELD OF STUDY OF NEW ENTRANTS, BY SEX, TO NON-HEA DESIGNATED COLLEGES								
en en en en	Ma	Fem	nale	TOTAL					
Field of Study	N	%	N	.%	N	%			
Construction Studies	571	11.5	87	2.0	658	7.1			
General Engineering	1,877	37.8	130	3.0	2,007	21.6			
Science	488	9.8	734	16.9	1,222	13,1			
Art & Design	178	3.6	397	9.1	575	6.2			
Computer Studies	309	6.2	242	5.6	551	5.9			
Business, Administrative & Secretarial Studies	1,242	25.0	1,543	35.5	2,785	29.9			
Hotel, Catering & Tourism	104	2.1	345	7.9	449	4.8			
Education	123	2.5	627	14.4	750	8.1			
General Studies	68	1.4	243	5.6	311	3.3			
TOTAL	4,960	100.0	4,348	100.0	9,308	100.0			

Age of New Entrants

In examining the age of new entrants it was decided to focus on the age on October 1st 1986, this being the approximate median date of commencement of the academic year. Table 6 shows the distribution of new entrants by age and college type on October 1st. For comparative purposes, the table also presents the overall distribution, by age, of the 1980 new entrants cohort. It is noted that the largest percentage (46%) of new entrants in 1986 were aged 18 at the time. A further 34% were aged 17, while 13.5% were aged 19. These findings are significantly different from those of the 1980 study where the modal age at entry was 17, as opposed to 18 in this study. The percentage of students from the 1986 cohort under 18 at the time of entry (35%), is nine percentage points fewer than was the case in 1980. The percentage of students aged 19 at the time of entry in 1986 was 13.5% compared to 9.6% in 1980. However, it is of interest to note that in spite of this substantial rise in the modal age of entry by 1986, there was a reduction in the percentage of students aged 20 or over. In 1980, 7.8% of new entrants were aged 20 or over; this percentage had dropped to 5.1% for the 1986 cohort.

The increase in the modal age of new entrants is partly accounted for by the increase in the number of repeat Leaving Certificate students (discussed below). However, the degree of change on this variable appears less significant if we look at change in the median age rather than in the modal age. The median age of new entrants in 1986 was 18 years and 4 months, compared to 18 years and 2 months in 1980. This more modest rise in the median age of new entrants is accounted for by the fact that the 9% decrease in the number of new entrants under 18 at the time of entry is partly offset by a reduction of almost 3% in the number of new entrants aged 20 or over. It is likely that the reduction in the number of older students among the new entrants reflects the absence of any system of financial aid catering for older students. The non-availability of financial aid for older students is compounded by the sharp increase in fees for all third-level students in recent years.

TABLE 6

Age		1986 New Entrants								
- Age	Univer- sities	NIHEs	DIT	RTC	Colls. of Ed.	Other Colls	TOTAL	тота		
	%	%	%	%	%	%	%	%		
Under 17	1.1	1.2	0.7	1.0	1.0	0.9	1.0	2.		
17	33.5	39,6	31,8	34.5	33.8	30.7	34.0	42.0		
18	47.7	48.0	44.9	45,7	43.7	42.2	46.3	38.5		
19	12.7	8.5	15.9	14.3	13.2	14.7	13,5	9,6		
20	2.0	1.4	3.3	2.6	1.6	3.4	2.3	2.8		
21	0.5	0.2	1.3	0.9	1.5	3.4	0.8	1.4		
22 - 25	1.0	0.2	1,4	0.9	4.0	3.2	1.2	_ 2.3		
26 - 30	0.7	0.3	0.5	0.1	0.7	0.9	0.4	0.7		
31 - 40	0.5	0.2	0.1	0.03	0.4	0.3	0.3	0.5		
Over 40	0.2	<u>-</u>	0.05	_	_	0,3	0.1	0.1		
TOTAL %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
TOTAL N	6,430	1,147	2,199	6,112	916	348	17,152*	13 360		

^{*} Precise information on age was not available for seven new entrants.

The age distribution of new entrants is broadly similar for males and females (Appendix Table A4). However, female new entrants tended to be somewhat younger. Thirty-eight per cent of female new entrants were under 18 years at the time of entry compared to 32% of males. In addition, a smaller percentage (4.1%) of female new entrants were aged 20 or over at the time of entry; 6.2% of male new entrants were in this age group. The analysis of the age distribution of the new entrants by college type does not reveal any marked differences. The modal age at the time of entry was 18 for all college types. The NiHEs had a slightly larger percentage (41%) of new entrants under 18, than was the case in the other colleges. The category 'other colleges' had the largest percentage (11.5%) of new entrants aged 20 or over followed by the Colleges of Education (8%). The colleges of the DIT had the highest percentage (16%) of new entrants aged 19 at the time of entry.

A more detailed analysis of the age of new entrants in each college is provided in the Appendix (Table A5). Within the university sector, new entrants to the RCSI were somewhat older, the modal age being 19 in comparison with 18 in each of the other colleges. After the RCSI, TCD had the lowest percentage (25.8%) under 18 years at entry. Within the DIT there was little between college variation in age, although new entrants to Dublin College of Catering tended to be somewhat older. There was also little variation between the RTCs in the age distribution of new entrants. The modal age of entry was 18 in all colleges with the exception of Dundalk RTC, where the largest percentage (46%) of new entrants were aged 17. Galway RTC had the largest percentage (24%) of new entrants aged 19 or over at the time of entry.

Within the Colleges of Education sector the modal age of new entrants was also 18 in each of the colleges. The Mater Dei Institute had the smallest percentage (12%) of new entrants under 18 years, while this college and Thomond College were the only colleges in this sector to have enrolled a significant number of older students; 17% of new entrants to Thomond College and 14% of new entrants to Mater Dei Institute were aged 21 or over at entry. The five colleges in the 'other colleges' category exhibit greater variation in the age distribution of new entrants. Fifty one per cent of new entrants to the College of Industrial Relations were aged 17 at entry, while only 17% of those admitted to Shannon College of Hotel Management were in this age group. Thirteen per cent of new entrants to the Dun Laoghaire School of Art and Design were aged 21 or over at entry as were 10% of entrants to the National College of Art and Design.

The age distribution of new entrants, by field of study, for HEA-designated and non-designated colleges is also presented in separate tables in the Appendix. In respect of HEA designated colleges (Table A6) the modal age of entry to all fields of study was 18. The fields of study which enrolled the highest percentages of students under 18 years were Communications and Information Studies (42%), Engineering (41.5%) and Science and Commerce each of which had 41% in this age group. In contrast, only 19% of new entrants to Economic and Social Studies and 25% of new entrants to Architecture were under 18 at the time of entry. The fields of study which enrolled the largest percentages of students aged 21 years or older were Education (17%), Art and Design (10%), Economic and Social Studies (9%), Social Science (8%) and Medicine (7.5%).

The distribution of new entrants by age and field of study for the non HEA designated colleges is shown in Table A7. Here also the modal age of new entrants was 18 for all fields of study. Computer Studies was the field of study which enrolled the largest percentage (41%) of new entrants under the age of 18. In contrast, only 15% of students in the General Studies category were in this age range. This field of study was the only one to enrol a significant number of older students; more than 14% of these students were aged 21 or over at the time of entry. This contrasts with the situation in Hotel, Catering and Tourism, Business, Administrative and Secretarial Studies and Science where only 1% of new entrants were aged 21 or over at entry.

Socio-Economic Status of Entrants

An important aim of this study was to examine the socio-economic status of new entrants. Although data on socio-economic status is now being collected and published annually for the HEA designated colleges there has been no published information on this variable for the non- HEA designated colleges since the publication of the 1980 survey. For the purpose of this analysis foreign students and those from Northern Ireland were excluded. In addition, information on socio-economic status was either not available or was inadequate for purposes of classification for 14% of students from the Republic. The percentage of students for which this information was unavailable was 10% for the universities and NIHEs, 18% for the DIT, 20% for the RTCs, 7% for the Colleges of Education and 12% for the 'other colleges'. The extent of this missing information is regrettable but was something over which the researcher had no control, since the study was based on existing student records. While it was possible in the case of much of the missing data on other variables to ask college personnel to seek the additional data from students this was not deemed to be justified in this case. Students are aware that information on socio-economic status is not vital for college authorities, and if they choose to withhold the information their decision has to be respected.

When confronted with a substantial amount of missing data the critical question which arises is whether such missing data is randomly distributed across the study population or whether its absence may be particularly associated with certain subgroups. It is rarely possible to resolve this question unequivocally, although it is possible to examine some indicators of the degree of possible bias which might exist. In addition to the problem of missing data a further question surrounds the accuracy of the classification made in view of the limited amount of information collected. Typically, students are asked a single question on the occupation of the parent or guardian and they are assigned to an appropriate socio-economic group on the basis of the response to this single question.

Since no research has been done on the validity of the socio-economic group classification of Irish students it is of interest to note the result of a recent study in Britain which involved an assessment of the accuracy of the Universities Central Council on Admissions' (UCCA) statistics on the social class background of students. In a postal questionnaire study of a 10% sample of students accepted for a university place in 1984, Rudd (6) collected a detailed set of information on parents' occupations, education and formal qualifications. The social class categorisation based on this information was then compared with the classification made by UCCA. Rudd found that in three-quarters of the cases both classifications were identical. Where there was a difference, the tendency was for UCCA to put the students into too low a social class, rather than too high a class. However, this error was cancelled out by the incorrect assumption that uncoded students have the same social class distribution as the rest. Rudd found that students who could not be assigned by UCCA to a social class category were more likely to come from lower socio-economic groups.

In the present study the categories used to measure socio-economic status are those, based primarily on occupation, used by the Central Statistics Office in reporting the Census of Population (See Appendix E). Some of the limitations associated with the use of these categories, arising from an absence of details on employment status, are discussed below. However, the main advantage in their use is that they enable us to compare the social background of third level entrants with the relevant section of the national population. The most appropriate comparative population group for whom data are available is the distribution by social group of children under 15 years at the time of the 1981 Census. It was from this cohort that the 1986 higher education entrants were drawn.

The distribution of new entrants by socio-economic group is presented in Table 7 together with the 1981 distribution of the national population under the age of 15. To facilitate comparison between the age of each social group and its proportionate representation among higher education entrants a participation ratio has been calculated and included in Table 7. This ratio is an approximate measure of the degree to which each social group is either proportionately represented, 'over-represented' or 'under-represented' among third level entrants. For comparative purposes Table 7 also includes the participation ratio by social group which was calculated from the 1980 survey data.

The largest percentage (20.8%) of new entrants came from the Farmers social group. The representation of this social group exceeds the proportionate size of the comparison population group (14.3%). This gives a participation ratio of 1.45, showing that the Farmers social group are now 'over-represented' among higher education entrants. Students from the Employers and Managers social group constituted 18.2% of new entrants although this group comprised only 9.2% of the population of children under the age of 15 in 1981. The participation ratio for this social group was 1.98. Almost thirteen per cent of new entrants came from the Skilled Manual Workers group although this group comprised 25.4% of the comparative population group. This social group is 'under-represented' in higher education, the participation ratio being .51. The most seriously under-represented social group is that of Unskilled Manual Workers. Only 1.3% of new entrants came from this social group although it contains 8.2% of the comparison population group. At the other end of the social scale, students from the Higher Professional group form 12.0% of the new entrants, although this group comprises only 4% of the target population.

The findings presented in Table 7 show that in 1986 five social groups were over-represented in admission to higher education. These groups with their associated participation ratios were Higher Professional (3.00), Salaried Employees (2.3), Lower Professional (2.14), Employers and Managers (1.98) and Farmers (1.45). Five social groups were significantly under-represented as shown by their participation ratios: these were Unskilled Manual Workers (.16), Semi-skilled Manual Workers (.42), Other Non-manual Workers (.45), Other Agricultural Occupations (.48) and Skilled Manual Workers (.51). The participation ratio (.96) of the Intermediate Non-manual social group reveals that the representation of this group among higher education entrants corresponds approximately to the size of the comparison population group. However, if account is taken of the special difficulties which arise in the coding of certain occupations, it is probable that the participation ratio of the Intermediate Non-manual Workers group is underestimated in this table while that for the Employers and Managers group is somewhat overestimated.

TABLE 7

	CIO-ECONOMIC	GROUP FOR	1986 AND 1980)
Socio-Economic Groups	Higher Education Entrants in 1986	National Population Under 15 yrs in 1981	Participation Ratio 1986	Participation Ratio 1980
	%	%		
Farmers	20.8	14.3	1.45	1.04
Other Agricultural Occupations	1.4	2.9	0.48	0,21
Higher Professional	12.0	4.0	3.00	3.93
Lower Professional	9,2	4.3	2.14	2.29
Employers & Managers	18.2(15.8)*	9.2	1.98(1,72)*	2.75
Salaried Employees	6.2	2.7	2.30	2.93
Intermediate Non – Manual Workers	9.8(12.3)*	10.2	0.96(1.21)*	1.11
Other Non-Manual Workers	5.7	12.8	0.45	0.50
Skilled Manual Workers	12.9	25.4	0.51	0.51
Semi-Skilled Manual Workers	2.5	5.9	0.42	0.49
Unskilled Manual Workers	1.3	8.2	0.16	0.11
ΓΟΤΑL %	100.0	100.0		
N	14,388	969,951		<u></u> -

^{*} These percentages and participation ratios have been adjusted to take account of possible bias in classification of certain occupations (see text for details).

Particular coding difficulties arise in relation to two occupational groups which represent major components of both the Employers and Managers and the Intermediate Non-Manual social groups. The occupational groups in question are proprietors and managers (in wholesale and retail trades, garages and services) and civil servants and local authority officials. An accurate social group classification of proprietors requires information on employment status. Proprietors who are employers should be allocated to the Employers and Managers social group, while self-employed proprietors, without employees should be allocated to the Intermediate Non-Manual Workers Group. Similarly, an accurate classification of civil servants and local authority officials requires information on the rank of persons in these occupations. Senior officials should be allocated to the Employers and Managers group, while other clerical workers in government departments and local authorities should be classified in the Intermediate Non-Manual Workers Group. Since this level of detail is rarely available in respect of parents' occupation, all students with parents who were proprietors in these areas or civil servants and local authority officials were classified in the Employers and Managers group. This decision inevitably involves some overestimation of the participation ratio of the Employers and Managers social group and some underestimation of the Intermediate Non-Manual Workers group.

In the present study an attempt was made to estimate the degree of bias introduced by this procedure.

In classifying the parents' occupation of new entrants to the colleges not affiliated to the CAO all students whose parents were proprietors (in wholesale and retail trade, garages and services) or civil servants or local authority officials were identified separately. Altogether they constituted 40% of the total number of students from the Employers and Managers group. However, on the basis of data from the 1981 Census of Population (Vol. 7) it was established that 41% of males in the combined occupational groups of proprietors and managers and civil servants and local authority officials belong to the Intermediate Non-Manual Workers group. Thus, a substantial reallocation of students from the Employers and Managers group to the Intermediate Non-Manual group is required. A reallocation of approximately one-third of the students in these occupational groups was considered appropriate (rather than the 41% which a strict proportional reallocation would dictate), since it is assumed that the class differential implicit in the distinction between 'senior civil servant' and 'clerical worker' and between 'proprietor with employees' and 'self-employed proprietor' is reflected in differential higher education participation rates. On the basis of these considerations a revised estimate of the percentage of new entrants from the Employers and Managers and the Intermediate Non-Manual Workers groups is included (in parentheses) in Table 7. In addition, revised participation ratios, which take account of these adjustments, are also included.

The major importance of these revised estimates is that the Intermediate Non-Manual Workers group is now considered to be one of the over-represented groups. It is estimated that 12.3% of new entrants came from this social group giving a participation ratio of 1.21. The participation ratio of the Employers and Managers group has been corrrespondingly adjusted downwards to 1.72. These adjustments can be made in the aggregate data only. In the subsequent analysis the unadjusted percentages and participation ratios will be used.

In considering possible sources of inaccuracies in the data it is appropriate to take into account the 14% of new entrants for whom there was insufficient information to enable them to be assigned to any socio-economic group. It should, of course, also be noted that the Central Statistics Office similarly failed to classify 10% of the national population. The decision to exclude these unknown categories in calculating the percentage distributions in Table 7 appears to assume that those unclassified are randomly distributed between the socio-economic groups. In the absence of any evidence to the contrary this seems a reasonable assumption to make. However, as Rudd's findings in Britain suggest, this assumption may not be justified. In searching for any possible evidence of systematic bias it was decided to compare those whose socio-economic group was unknown with the rest of the study population on two indicators, type of post-primary school attended and funding.

In respect of post-primary school attended it is revealed (Appendix, Table A8) that new entrants to higher education not classified by socio-economic group are less likely to have attended fee-paying secondary schools (5.2% compared to 9.8% for the remainder). They are also less likely to have attended private non-recognised schools (1.6% compared to 2.6%). However, they are more likely to have attended vocational schools (15.2% compared to 11.7%). There is substantial research evidence that type of post-primary school attended is related to socio-economic status of parents, with the higher socio-economic groups being over-represented in secondary school, especially fee-paying schools, and lower socio-economic groups being over-represented in vocational schools (7).

A similar comparison between those unclassified by socio-economic group and the remainder was made in respect of the percentage in receipt of Higher Education Grants or VEC Scholarships, eligibility for which is based on parental means. This analysis was confined to those new entrants in the universities, the NIHEs and the colleges of education where this means tested grant is almost the only form of financial aid available. It was found (Table A9) that 63% of those for whom socio-economic status was unknown were in receipt of a state grant compared to 34% from the remainder.

The trend in respect of these two indicators suggests that students from lower socio-economic groups may indeed be over-represented among those for whom socio-economic status is unknown. However, this evidence is not conclusive. Research which is designed specifically to address this issue is required. Pending a precise quantification of any possible bias in the data on students' socio-economic background

it is appropriate to place in perspective our concern on this validity issue. The measure of socio-economic status, like many indicators in social research, is not a perfect measure. However, there is no reason to suspect that the pattern revealed is seriously biased. We are concerned only with the possibility of quite modest over-estimates or under-estimates for particular socio-economic groups. For example, if it was assumed that all of the 14% unclassified were from the five lower socio-economic groups, these groups would still be seriously under-represented among new entrants to higher education. This assumption is, of course, completely unrealistic. The most likely impact of a possible bias in the data would be to increase the participation rate of these five lower socio-economic groups from the present estimate of .41 by a few percentage points but it would still remain below .5. Thus, we can confidently proceed to analyse further the socio-economic status of the new entrants in the knowledge that the trends revealed reflect, within a small margin of error, the real situation.

The data presented in Table 7 allow us to examine the changes in the participation ratio of the different social groups between 1980 and 1986. Perhaps the main feature of this change is the increase in the participation ratio of the Farmers social group. In the 1980 survey the representation of this group was directly proportionate to its size in the population, while in the present study it has become an 'over-represented' group. It is also of interest to note that the position of the Other Agricultural

TABLE 8

PERCENTAGE DISTR ENTRANTS TO HIGHE	R EDUCATI	PARTICIPA ON BY SOCI ENDER	TION RATIO O-ECONOMI	OF NEW C STATUS		
	% Distri	bution	Participation Ratio			
Socio-Economic Groups	Male Female		Male	Female		
	%	%	%	%		
Farmers	17.5	23.8	1,22	1,66		
Other Agricultural Occupations	1.4	1.3	0.48	0.45		
Higher Professional	12.7	11.8	3.18	2.95		
Lower Professional	9.1	9.5	2.12	2.21		
Employers & Managers	18.5	18.2	2.01	1.98		
Salaried Employees	6.7	5.6	2.48	2.07		
Intermediate Non-Manual Workers	10.6	9.0	1.04	0.88		
Other Non-Manual Workers	5.8	5.6	0.45	0.44		
Skilled Manual Workers	13.6	11.8	0.54	0.46		
Semi-Skilled Manual Workers	2.7	2.2	0.46	0.37		
Unskilled Manual Workers	1.5	1,2	0.18	0.15		
TOTAL %	100.0	100.0	-			
TOTAL N	8,964	8,196	-			

Occupations group has also improved: its participation ratio has increased from .21 to .48. However, this social group is still seriously under-represented amongst higher education entrants. The improvement in the participation ratio of these social groups is compensated for by the drop in the participation ratio of each of the Non-Manual social groups. For example, the participation ratio of the Higher Professional group has decreased from 3.93 to 3.00. What this decline signifies is that this group was, in 1986, over-represented by a factor of three, in comparison with a factor of four in 1980. There has been a similar proportionate decline in the participation ratio of the Employers and Managers group with smaller decreases in the participation ratio of the Salaried Employees and Lower Professional groups. However, all of these three groups remain significantly over-represented.

One of the most striking features of this comparison between the social group participation ratios in the two studies is the consistency of the findings in respect of the three Manual Workers groups, and the Other Non-manual Workers group. The participation ratio of the Skilled Manual Workers group was identical at .51 for the two studies, and while the participation ratio of the Unskilled Manual Workers group shows a slight increase from .11 to .16, the ratio for the Semi-skilled Manual and Other Non-manual groups shows a decline between 1980 and 1986. These findings point to the stubborn persistence of marked social inequalities in rates of admission to higher education.

Thus far in our discussion of the socio-economic status of new entrants to higher education we have not differentiated by gender. However, as Table 8 shows some gender differentials are evident. Almost 24% of

TABLE 9

LDUCA	TION IN	1900,	DY GOI	LLEGE	IYPE		
Socio-Economic Groups	Uni- versities	NIHE	DIT	RTC	Colls of Ed	Other Colls	
	%	%	%	%	%	%	%
Farmers	16.2	23.7	11,3	27.8	32.1	7.6	20.8
Other Agricultural Occupations	0.9	1.8	1.4	1.9	1.2	1.0	
Higher Professional	19.0	9.1	11.7	5.7	4.1	18.3	12.0
Lower Professional	11.0	10.1	7.4	6.5	14.1	13.6	9.2
Employers & Managers	17.9	14.8	26.4	15.9	17.1	26.2	18.2
Salaried Employees	8.1	9.0	6.0	3.9	3.9	7.3	6.2
Intermediate Non-Manual Workers	13.1	12.5	7.7	6.9	8.5	5.3	9.8
Other Non-Manual Workers	3.5	4.6	8.5	7.6	4.8	6.0	5.7
Skilled Manual Workers	8.0	10.5	16.3	17.9	11.1	12.3	12.9
Semi-Skilled Manual Workers	2.1	3.4	1.9	3.0	2.2	2.3	2.5
Unskilled Manual Workers	0,3	0.5	1.3	2.9	0.9	0.0	1.3
TOTAL %	100.0	100.0	100.0	100.0	100,0	100.0	100.0
TOTAL N	5,512	1,016	1,803	4,900	856	301	14,388

female new entrants came from the Farmers social group, while 17.5% of male new entrants came from this group. This gender differential, in favour of females, may be related to the fact that farmers' sons are more likely to inherit farms and are, thus, less dependent on education to secure their future status. Gender differentials are less marked for the other socio-economic groups. However, it is significant that the participation ratio for females is lower than that for males in each of the five lower socio-economic groups. The female participation ratio is also lower than that for males in four of the five higher socio-economic groups, the exception being the Lower Professional group.

Table 9 shows the distribution of the new entrants by social group and type of college. Students from the Farmers social group formed a higher percentage of new entrants to the Colleges of Education (32%) and the Regional Technical Colleges (28%) than to the other types of college. Students from the Higher Professional group were disproportionately represented in the University sector and in the 'other colleges' category. This group had its lowest proportionate representation in the Colleges of Education and in the Regional Technical Colleges. The colleges of the Dublin Institute of Technology and those colleges classified in the 'other colleges' category had the highest percentage (26%) of students from the Employers and Managers group. Students from the Skilled Manual Workers group formed a higher percentage of new entrants to the Regional Technical Colleges (18%) and to the Dublin Institute of Technology (16%) than to the other college types.

More detailed information on the distribution of new entrants by socio-economic status for each college is given in the Appendix (Table A10). Within the University sector students from the Farmers social group formed a larger percentage of new entrants to UCG (26%), Maynooth (23%) and UCC (21%) than in the other colleges. This finding is not unexpected in view of the large farming population in the catchment area of each of these colleges. More than two-thirds of Irish students who entered the RCSI came from the Higher Professional group; students from this social group also constituted a relatively large percentage of entrants to TCD (26%) and UCD (23%). Students from the Employers and Managers social group were also strongly represented in TCD (21%) and UCD (21%). In contrast, students from the Skilled Manual Workers group formed a higher percentage of new entrants to Maynooth (14%) than to any of the other colleges.

The strong representation of students from the Farmers social group in the Colleges of Education has already been mentioned. This is especially marked in the Church of Ireland college where they constitute 61% of all new entrants, and also in Mary Immaculate College where they constitute 39% of the intake. Students from the Employers and Managers social group are disproportionately represented in St Angela's (33%) and in the Sion Hill colleges (30%). Students from the Skilled Manual Workers group have their highest proportionate representation in Thomond College (18%).

The social group profile of the different colleges within the Dublin Institute of Technology is broadly similar across the colleges. Students from the Farmers and Skilled Manual Workers groups have a lower proportionate representation in the College of Marketing and Design than in the other colleges. Bolton Street College of Technology has the highest percentage of students from Manual Workers groups; 19% of its students were from the Skilled Manual Workers group, while a further 4.5% were drawn from the Semi-skilled and Unskilled groups.

Within the Regional Technical Colleges the Farmers social group is most strongly represented in Tralee (44%), Athlone (35.5%), Sligo (35%) and Galway (32%). The Limerick College (CoACT) had the highest proportionate representation of the Higher Professional group (10%). It also had a high percentage (24%) of its students from the Skilled Manual Workers group, exceeded only by Dundalk which had 25% of its new entrants from this group. A significant departure from the general pattern in these colleges is the 9.6% of students in Waterford RTC who were coded as coming from the Unskilled Manual Workers group. This is the only one of the colleges not affiliated to the CAO in which the coding of occupations was not done by the researcher. Only the previously coded information was available on the college records. However, because of a printer's error in the coding frame used it is likely that the occupation building contractor may have been inadvertently allocated to the Unskilled Workers Group. Such an error would have greatly overestimated the percentage of students in the Unskilled Manual Workers group and have

underestimated the percentage of students in the Skilled Manual Worker group.

The distribution of students by social group in the five 'other colleges' reveals a number of trends. Students from the Farmers social group were particularly under-represented in Dun Laoghaire School of Art and Design (4.6%), the College of Industrial Relations (5.3%) and NCAD (5.4%). Both the College of Industrial Relations and the Dun Laoghaire School of Art and Design had a disproportionate number of students from the Higher Professional group while Shannon College of Hotel Management and NCAD had a higher percentage of students from the Employers and Managers social group. Students from the Skilled Manual Workers group formed a higher percentage of new entrants to the Crawford Municipal School of Art than to any of the other colleges in this category.

The differential pattern of admission by social group in the individual colleges partly reflects the different programmes of study available in these colleges. This relationship between field of study and socio-economic status of entrants is illustrated in the Appendix. In respect of HEA designated colleges(Table A11) it is clear that students from the Farmers social group form the largest percentage of the new entrants to Dairy Science (55%), Agricultural Science (51%) and Veterinary Medicine (37.5%). Students from the Higher Professional group are disproportionately represented in Architecture (32%), Medicine (30%) and Law (29%), while Economic and Social Studies and Art and Design both had a high percentage (30%) of their students from the Employers and Managers group. Students from the Skilled Manual Workers group formed a higher percentage of new entrants in Education (18%) and Art and Design (14%) than in the other fields of study; this group had nobody in Veterinary Medicine and formed only a very small percentage of new entrants to Economic and Social Studies (2%), Agricultural Science (3.5%), Law (4%) and Medicine (5%).

The distribution of new entrants by socio-economic status and field of study in the non -HEA designated colleges is presented in Table A12. In addition to their strong representation in Education (32%), students from the Farmers social group formed a large percentage (31%) of new entrants into Science. Students from the Higher Professional group constituted a relatively high percentage (16%) of entrants to Art and Design, while the Employers and Managers group were particularly strongly represented (29%) in Hotel, Catering and Tourism. Students from the Skilled Manual Workers group constituted 25.5% of new entrants to Construction Studies while they were also relatively well represented in Science and Computer Studies.

Financial Aid

One of the unique features of this study was that information was collected on all new entrants to establish if they were in receipt of any financial aid. Two main types of financial aid are available for higher education students in Ireland. The first type, which is means tested and based on academic attainment, is awarded by Local Authorities under two separate schemes, The Local Authority Higher Education Grants Scheme and The Vocational Education Committee Scholarships. The Local Authority Higher Education Grants Scheme was designed for students at universities and comparable institutions, while the V.E.C. Scholarships were designed for students pursuing courses, which normally lead to a technical qualification, at NIHEs, RTCs and other Technological Colleges. The value of the grants or scholarships under both schemes is similar and is divided into a tuition fee element and a maintenance element. Subject to consideration of the parents' financial means and the number of dependent children in the family a student in 1986 may have been awarded a maximum or reduced maintenance element plus tuition fee or the tuition fee only, either in whole or in part. The level of the award is also dependent on the distance of a student's home residence from the college. The schemes differ in respect of the level of academic attainment required to qualify for a grant or scholarship. For a Higher Education Grant four Grade Cs or higher on Higher Level papers are normally (8) required, while two subjects at this level of attainment is sufficient to qualify for a VEC scholarship. The second main type of funding available for higher education is that provided by the European Social Fund Training Grants Scheme. This scheme covers one year and two year programmes at National Certificate Level in the RTCs and the Colleges of Technology. ESF grant holders have their course fees paid and, in 1986, were awarded a grant of £464 or £1,160 per academic year depending on the proximity of the family residence to the college. Unlike the Local Authorities' Grants and Scholarships, ESF funding is not means tested. In addition to these two main

TABLE 10

DISTRIBUTION C	F NEW EN	TRANTS	, BY TYP	PE OF FII E	NANCIA	L AID
	Grant	ESF	Other	None	TOT	AL
College Type	%	%	%	%	%	N .
Universities	33.7	-	1.7	64.3	100	6,137
NIHEs	52.5	-	0.4	47.0	100	1.125
DIT	16.4	50.4	8.0	32.4	100	2,188
RTCs	4.3	88.3	0.2	7.1	100	6,108
Colleges of Education	39.6	-	8.0	52.4	100	916
Other Colleges	2.3	39.2	10.8	47.7	100	342
TOTAL	21.8	39.4	1.5	37.3	100	16,816

types of financial aid there are a small number of other forms of financial aid available. These include Entrance Scholarships or Exhibitions, Easter Week or Gaeltacht Scholarships and special subventions made by employers to encourage the pursuit of certain programmes of study.

The analysis of the extent of financial aid enjoyed by new entrants to higher education is confined to students from the Republic of Ireland. In respect of students who were in receipt of Higher Education Grants or VEC Scholarships, it was not possible to establish the level of grant or scholarship which was held. Thus, students who were in receipt of a grant towards tuition fees only could not be differentiated from those who were in receipt of the maximum maintenance grant plus tuition fee.

Table 10 shows the distribution of students by college type and source of funding. It is revealed that almost 22% of new entrants were in receipt of a higher education or VEC grant while 39% were in receipt of ESF funding. A further 1.5% were in receipt of 'other funding' while the largest percentage (37%) of new entrants were in receipt of no funding. The distribution of students, by funding, differs markedly for the different types of college. The overwhelming majority (88%) of new entrants to the Regional Technical Colleges were in receipt of ESF funding, while this form of aid was available to half of the new entrants to the Dublin Institute of Technology. Thirty nine percent of new entrants to the 'other colleges' were in receipt of ESF funding. None of the students in the Universities, NIHEs or Colleges of Education are, of course, eligible for ESF funding. More than half (52.5%) of new entrants to the NIHEs were in receipt of local authority grants (9) while 40% of new entrants to the Colleges of Education were in receipt of these grants. A third of new entrants to the Universities were in receipt of local authority grants, as were 16% of the entrants to the colleges of the DIT. Only 4% of the new entrants to the RTCs and 2% of the entrants to the 'other colleges' were in receipt of local authority grants. The differential pattern of available funding results in the fact that within the Universities almost two-thirds (64%) of new entrants are in receipt of no financial aid. This is also the situation in respect of more than half (52%) of the new entrants to the Colleges of Education and just under half of the new entrants to the 'other colleges' (48%) and to the NIHEs. Just under one-third of the DIT entrants were in receipt of no funding as was the case with 7% of new entrants to the RTCs.

The distribution of students by source of funding for each individual college is presented in the

Appendix (Table A13). Within the University sector UCG has, by far, the highest percentage (60%) of students in receipt of local authority grants. Thirty nine per cent of new entrants to UCC and 27% of UCD entrants had grants, while this was the case for 25% of new entrants to TCD and for 24% of new entrants to Maynooth. There was little variation in the percentage of new entrants to the two NIHEs who were in receipt of local authority grants; Limerick had 53.5% and Dublin had 51% in this category.

Because of the widespread availability of ESF funding there is little variability in the pattern of funding in the different RTCs. Less than 2% of new entrants were without funding in Dundalk, Tralee,Letterkenny and Carlow. Waterford RTC represents the most significant departure from the general pattern. Here only 69% of new entrants were in receipt of ESF funding while a further 12% were in receipt of a local authority grant. This left 18% of new entrants without any funding. This relatively high proportion of students without funding is explained by the fact that Waterford RTC has a significant number of courses of more than two years' duration which do not qualify for ESF funding. Galway RTC also had a significant percentage (13%) of new entrants without any funding.

Within the colleges of the DIT, Kevin Street had the smallest percentage (18.5%) of its students in receipt of ESF funding; in the other colleges the percentage of students in this category ranged from 57% to 65%. In contrast, Kevin Street had the highest percentage (26%) of students in receipt of local authority grants.

Within the Colleges of Education students at the Mater Dei Institute are not eligible for local authority grants. However, the majority (74%) were in receipt of 'other funding'. In the three Sion Hill colleges only 23% of the students were in receipt of local authority grants while in the other Colleges of Education the percentage in this category ranged from 39% in Marino to 49% in Thomond College.

The pattern of funding in the 'other colleges' category is quite variable. Almost all students in Crawford College of Art and Design (98.5%) were in receipt of ESF funding. In Shannon College of Hotel Management none of the students were in receipt of financial aid. This was also the situation in the case of 97% of students at the NCAD. The very small percentage (N = 3) of new entrants to the NCAD in receipt of local authority funding is anomalous. The majority (69%) of new entrants to this college were enrolled on the Art and Design Foundation Certificate course which does not qualify for the award of a local authority grant. However, of the other new higher education entrants to the college only 9% were in receipt of a local authority grant suggesting that a grant scheme which is based on academic achievement may not be appropriate for an art college which gives priority to artistic merit in selecting students. In the College of Industrial Relations 60% of the new entrants were in receipt of 'other funding'.

The distribution of students by type of financial aid and field of study is presented in the Appendix. In respect of HEA designated colleges (Table A14) the fields of study in which the highest percentage of new entrants had local authority grants were European Studies (58.5%), Education (49%) and Commerce (45%). A further 17.5% of students in Education were also in receipt of 'other funding'. The fields of study in which the lowest percentage of new entrants were in receipt of local authority grants were Art and Design (3%) and Economic and Social Studies (11%).

In the case of non HEA designated colleges (Table A15) the fields of study in which the highest percentage of students had no funding were Education (56.5%), Hotel, Catering and Tourism (48%) and General Studies (31%). In the other fields of study in these colleges the percentage of new entrants in receipt of ESF funding ranged from 75% to 93%.

Some gender differentials are evident in the distribution of new entrants by type of financial aid (Table A16). A higher percentage of female new entrants (39%) were not in receipt of any financial aid; 35.5% of male new entrants were without any financial aid. This gender differential is accounted for by differences in the distribution of ESF funding. Forty-two per cent of male new entrants were in receipt of ESF funding compared to 36% of female new entrants. This six per cent differential in favour of males is partially offset by an almost three per cent differential in favour of females in the distribution of local authority grants. Twenty three per cent of female new entrants were in receipt of local authority grants in comparison with 20.5% of male new entrants.

Predictably the pattern of funding is related to the socio-economic status of new entrants (Table 11). This is most obvious in the case of the means-tested local authority grants. Thirty five per cent of new entrants from the Farmers social group and from the Semi-skilled Manual Workers group were in receipt of local authority grants. In contrast, 7% of students from the Higher Professional group and 12% from the Employers and Managers group were in receipt of these grants. Since ESF funding is not means-tested the social group differentials evident in respect of this funding merely reflect the pattern of recruitment by social group into the programmes of study which are eligible for ESF support. More than two-thirds of students from the Unskilled Manual Workers group and more than half of the students from the Other Non-Manual Workers and Skilled Manual Workers were in receipt of ESF funding.

Overall, the number of students who are not in receipt of financial aid is the result of a complex interaction of factors including academic level of attainment, parental means and student course preference. The interplay of these factors results in significant social group differentials. Seventy per cent of students from the Higher Professional group and 58% of students from the Lower Professional group were not in receipt of financial aid. More than half of the new entrants from the Employers and Managers group (52%), the Salaried Employees group (52%) and the Intermediate Non-Manual Workers group (51%) were also without any financial aid. The social groups which had the smallest percentages of students without any financial aid were Unskilled Manual Workers (12%), Farmers (20%), Semi-skilled Manual Workers (22%) and other Agricultural Occupations (24%).

TABLE 11

		TABLE 1	<u> </u>			
DISTRIBUTION OF I			BY TYPE O		NCIAL A	ID
Socio-Economic	Grant	ESF	Other	None	TOTA	\L
Group	%	%	%	%	N	%
Farmers	34.9	44.5	0.9	19.7	2,997	100
Other Agricultural Occupations	29.6	46.2	0,5	23,6	199	100
Higher Professional	7.4	19,8	2.4	70.4	1,720	100
Lower Professional	13.7	26.3	2.6	57.5	1,324	100
Employers & Managers	11.7	35.0	1.3	52.1	2,615	100
Salaried Employees	19.4	27.0	1.9	51.7	888	100
Intermediate Non- Manual Workers	21.6	26.1	1.7	50.5	1,415	100
Other Non-Manual Workers	24.6	53.1	1.3	20.9	826	100
Skilled Manual Workers	23.7	52.5	1.2	22.5	1,854	100
Semi-Skilled Manual Workers	34.5	42.3	1.1	22.1	357	100
Unskilled Manual Workers	18.7	67.4	2,1	11.9	193	100
TOTAL %	20.9	37.1	1.5	40.6		100
TOTAL N	3,000	5,332	218	5,838	14,388	-

Type of Post-Primary School Attended

An understanding of the pattern of access to higher education requires an analysis of the transition from second to third-level. Thus, the present study sought information on the last post-primary school attended by each student. Students whose last post-primary school was outside the state are not included in this analysis. In addition, the relevant data were not available for a small number of Irish students, leaving a total of 16,565 for whom the appropriate data were obtained. It was found that 77% of the new entrants attended secondary schools, 12% attended vocational schools, 5.4% attended community schools, while 2.3% attended comprehensive schools. A further 2.5% attended "other schools", consisting mainly of private non-recognised schools specialising in offering repeat Leaving Certificate courses.

Table 12 shows the relationship between the type of post-primary school attended and the type of third-level college in which the new entrants enrolled. Thirty-nine per cent of new entrants who attended secondary schools enrolled in a university, while a further 35% enrolled in a Regional Technical College. In contrast, 48% of the new higher education entrants who attended a vocational school enrolled in one of the RTCs, while only 22% of this group went to a university. New higher education entrants from comprehensive schools were disproportionately represented in the NIHEs which enrolled 13.6% of these students. Almost 19% of entrants from community schools enrolled in the colleges of the Dublin Institute of Technology. These colleges also attracted a disproportionate share (16.9%) of the new entrants from the vocational schools. Finally, it is of interest to note that the universities attracted the overwhelming majority (78.3%) of the new higher education entrants who attended the private non-recognised "other schools" category.

This information on the post-primary school origin of the new entrants to higher education is more meaningful when considered in combination with post-primary school enrolment data. The researcher was

TABLE 12

Distribution of Ne and by	w Entrants Type of la	by Typ st Post-F	e of High Primary S	ner Educ School /	cation C Attended	ollege (entered
College Type	Second- ary	Voca- tional	Compre- hensive	Com- munity	Other Schools	TC	DTAL
	%	%	%	%	%	%	N
Universities	39.1	22.3	28.3	25.6	78.3	37.0	6,134
NIHEs	6.8	6.0	13.6	8.1	3.6	6.8	1,132
DIT	11.4	16.9	11.8	18.8	10.7	12.5	2,065
RTCs	35.1	48.2	36.8	39.6	3.4	36.2	5,995
Colleges of Education	5.6	4.9	6.9	5.0	1.7	5.4	901
Other Colleges	2.0	1.6	2.6	2.9	2.2	2.0	338
TOTAL %	100	100	100	100	100	100	-
TOTAL N	12,854	2,023	389	887	412	_	16,565

^{*} These data are also shown in the Appendix, Table A17, where the row percentages are shown rather than the column percentages. This table shows for each type of higher education college, the percentage of new entrants coming from each type of postprimary school.

given access by the Department of Education to enrolment data in the final year of the post-primary cycle for each of the 809 post-primary schools in the country. This made it possible to calculate for each school a transfer rate i.e. the percentage of the 1985/86 Leaving Certificate Class which enrolled in third-level education in 1986. Table 13 presents the distribution, by school type, of the 1985/86 Leaving Certificate cohort and the 1986 new entrants to higher education. More than 73% of the Leaving Certificate cohort were attending secondary schools, 6.8% fee-paying and 66.6% non-fee paying. A further 16.8% attended vocational schools,while 7.2% attended community schools and 2.6% attended comprehensive schools. When the distribution of new third-level entrants is examined it is observed that secondary schools have a higher proportionate representation; students in fee-paying secondary schools constituted 9.4% of the new higher education entrants, although they constituted only 6.8% of the Leaving Certificate cohort. This differential pattern is summarised by the transfer rate which has been calculated for each school type. Overall, the 1986 new entrants constituted approximately one-third of the 1985/86 Leaving Certificate year enrolment cohort with a transfer rate of 32.4%. The transfer rate for fee-paying secondary schools was 45.1% and 34% for non-fee paying secondary schools. The transfer rates for comprehensive, community and vocational schools respectively, were 30%, 25% and 24%.

TABLE 13

DISTRIBUTION OF NEW ENTRAN					
School Type	Leaving Co Class Enr 1985	olments	Higher E	trants to ducation 86	Transfer Rate
	N	. %	N	%	% .
Fee-Paying Secondary	3,386	6.8	1,526	9.4	45.1
Non Fee-Paying Secondary	33,225	66,6	11,332	70.2	34.1
Vocational	8,364	16.8	2,015	12.5	24.1
Comprehensive	1,299	2,6	388	2.4	29.9
Community	3,613	7.2	888	5.5	24.6
TOTAL	49,887	100	16,149	100	32.4

^{*}In addition to students who attended school outside the state and to those for whom no post-primary school data were available, this table also excludes those students whose last school was a private non-recognised school.

The transfer rates reported in Table 13 are based on information on the last post-primary school attended by each new entrant. The significant incidence of repeat students, many of whom change school for the repeat year, accounts for some distortion in the pattern revealed in this table. In particular, the transfer rate for vocational schools is boosted somewhat by the large number of students who transfer to selected vocational schools for a repeat Leaving Certificate year. For example, if the seven vocational schools (six in Dublin and one in Cork) which cater for large numbers of repeat students are excluded from Table 13, the transfer rate for the remaining vocational schools drops to 22%.

The different transfer rates to higher education, from the different types of post-primary school, represent only the final stage of a sequence of differential selectivity which is operative through the whole

ABLE 14

DISTRIBUTION OF POST-PRIMARY ENROLMENT OF A ONE-YEAR COHORT BY SCHOOL TYPE AND YEAR OF COURSE	IO NOIL	F POST-F	RIMAR	YENRC	LMENT	DLMENT OF A ONE YEAR OF COURSE	NE-YE) SE	AR COH	ЭВТ ВУ	сноо	L TYPE	AND
Year of Course	All Pos Sc	ost-Primary Schools	Sec	Secondary Schools	> > Sel	Vocational Schools	Compr	Comprehensive Schools	Com	Community Schools	Second	Secondary Tops
	Enrol- ment	Retent- ion Rate	Enrol- ment	Retent- ion Rate	Enrol-	Retent- ion Rate	Enrol- ment	Retent- ion Rate	Enrol- ment	Retent-	Enrol- ment	Retent-
1981/82 1st Year Junior Cycle	67,458		43,205	ı	17,001	1	1,789	1	5,348		115	
1982/83 2nd Year Junior Cycle	66,187	98.1	42,502	98.4	16 294	95.8	1,832	102.4	5,458	102.1	101	87.8
 1983/84 3rd Year Junior Cycle	63,941	94.8	41,220	95.4	15,488	99.1	1,684	1.46	5,475	102.4	74	64.3
1984/85 1st Year Senior Cycle	51,584	76.5	37,863	87.6	8,244	48.5	1,370	. 76.6	4,063	76.0	4	38.3
1985/86 2nd Year Senior	48,844	72.4	36,687	98 0.	7.362	43.3	1 229	68.7	3 528	9	Q	22.0

post-primary system. A key feature of this progressive selectivity is the differential retention rates for the different types of post-primary school. This is illustrated in Table 14 which is based on an analysis of aggregate enrolment data. The majority of those who were new entrants to higher education in 1986 would have begun a five year post-primary programme in 1981. Table 14 enables us to chart changes in the size of this cohort in each successive year. These changes are expressed as retention rates (10) through the post-primary cycle. A total of 67,458 students were enrolled in the first year post-primary in 1981/82. Four years later 72.4% of the cohort were in their fifth year; this reduced cohort represented the main target group from which 1986 third-level entrants were drawn.

Before discussing the differential retention rates by school type it is appropriate to indicate some of the limitations in the use of data at this level of aggregation. With such data it is not possible to quantify the amount of mobility between different types of schools; this explains how in respect of both comprehensive and community schools the size of the cohort actually increases at a particular stage. In addition, there is some lack of precision in view of the fact that some schools have either a four year junior cycle or a three year senior cycle. However, it is felt that these factors do not seriously distort the overall picture.

Secondary schools had the highest retention rate; less than 5% of the initial enrolment had dropped out by the Intermediate Certificate year, while almost 85% of the initial cohort were still enrolled in the Leaving Certificate year. In contrast, in vocational schools 9% of the initial enrolment had already dropped out before the third year, while only 43.3% persisted until the Leaving Certificate year. The retention rate through to Leaving Certificate was 66% for community schools and 68.7% for comprehensive schools. Finally, in respect of the 115 students who commenced their post-primary education in secondary tops only 33% were still enrolled four years later.

When the results of this analysis of post-primary retention rates are compared with the comparable analysis in the earlier report we observe a significant increase over the six year period. Table 15 shows that 59.5% of the 1975/76 first year junior cycle cohort survived to the Leaving Certificate year in 1979/80. This overall retention rate had risen to 72.4% for the 1981/82 first year junior cycle cohort. With the exception of community schools all school types show a significant increase in retention rates.

TABLE 15

	First Year Juni	ior Cycle Cohort
School Type	1975/76	1981/82
· 	%	%
Secondary	74.7	84.9
/ocational	25.1	43,3
Comprehensive	56.8	68.7
Community	65.8	66.0
Secondary Tops	11.1	33.0
II Post-Primary Schools	59.5	72.4

While it is clear that the trends revealed by these aggregate data indicate the general extent and direction of change at the post-primary level, it is necessary to enter a caveat in relation to the enrolment data in the final year of the senior cycle. As was pointed out in the previous discussion of transfer rates from the Leaving Certificate year to higher education, it is necessary in this analysis to take into account the increased incidence of repeat students. While this practice is not just a recent phenomenon, it has become an increasingly popular option in recent years. The extent of this pattern influences the enrolment data in the final year of the senior cycle. Precise figures are not available for the total number of repeat Leaving Certificate students enrolled in approved post-primary schools in 1985/86, although it is known that there were 2,367 such students in vocational, community and comprehensive schools. Furthermore, overall figures are available for the years 1986/87 (5,952) and 1987/88 (6,459). On the basis of these data, supplied by the Department of Education, it is estimated that the total number of repeat students in 1985/86 was 5,300. Approximately 20% of these repeat students are classified by the Department of Education as being in the third year of the senior cycle, thus they are not included in Table 14. However, this leaves a total of about 4,250 who are included in the second year senior cycle total. If this group is subtracted from this total in Table 14 it is estimated that the true retention rate to Leaving Certificate, excluding repeat students, is 66% or about two-thirds of the age cohort. There are no data available which would make possible an appropriate adjustment of the retention rate to the Leaving Certificate year in 1980 which was calculated in the earlier study. Some downward adjustment would be required, although not of the same magnitude as was appropriate for the 1986 Leaving Certificate cohort.

Educational Attainment of New Entrants

Detailed information was collected on the prior educational attainment of new entrants. In this report the analysis of examination data is confined to those students who had a Leaving Certificate and/or a University Matriculation Examination. Students who presented GCE or other foreign examination results are not included in the analysis. In addition, no examination data were available in respect of a small number of students. Some of this latter group would have been admitted as mature students where the normal academic prerequisites would not have applied. This left a total of 16,652 students for whom examination data were available.

Because of the competition for places in higher education many students seeking places present more than one examination. The additional examinations may be taken in the same year, as happens when students sit both the Leaving Certificate and NUI Matriculation, or they may be taken in different years. Different colleges have their own 'points system' and their own regulations which specify under what circumstances it may be possible to combine the results from more than one examination sitting.

The majority of colleges allow students to combine results from more than one year for the purpose of calculating a points score. In most cases there is no limit on the number of years for which results can be combined. In the case of Trinity College Dublin a maximum of three years' results can be combined, while in the Colleges of Education only two years' results can be combined. However, University College Dublin and University College Cork do not allow students to combine results from more than one year in calculating a points score. There is further variability amongst the colleges as to the acceptability of the NUI Matriculation Examination in calculating a points score. The majority of colleges accept the NUI Matric, the main exception being TCD. The NIHEs accept the NUI Matric for minimum entry requirements but not for the allocation of points. The number of subjects taken into account in the calculation of a points score also varies between colleges; it ranges from five for TCD to 7 for UCG. However, the greatest variability is found in the points allocated by the different colleges to the grades achieved by students in the Leaving Certificate and Matriculation examinations.

The present analysis does not seek to legitimate the scoring system adopted in any particular college. The first objective was to establish the subjects presented by each student together with the highest level of attainment reached in each subject. A composite examination score was recorded for each subject where the four highest grades on the University Matriculation Examination were, respectively, considered to be equivalent to the grades of A, B, C, and D on Higher level papers in the Leaving Certificate. Where more than one result was available for any particular subject the student was credited with the highest result.

EDU	EDUCATIONAL ATTAINMENT, BY SUBJECT, OF 1986 NEW HIGHER EDUCATION ENTRANTS	L ATTAI	NMENT,	BY SUB	JECT, OI	F 1986 N	EW HIG	HER ED	UCATIO	V ENTRA	NTS	. ,
		HIGHER	LEVEL				ΓΟ	LOWER LEVEL	/EL		TOTAL	
	4	a	ပ	۵	Other	٨	В	ပ	۵	Other	Z	%
Languages		-				-						
English	4.3	17.6	34.2	19.0	90	0.0	2.1	12.5	9.4	0.2	16,602	99.7
Irish	3.8	13.0	22.9	11.5	0.3	0.5	5.4	20.2	18.2	3.6	15,547	93.4
French	5.1	17.7	30.2	18.2	0.7	0.0	4.2	13.9	9.3	9.0	12,886	77.4
German	6.0	24.3	40.3	17.3	0.5	ı	2.3	5.7	3.3	0.2	962	5.8
Latin	9.6	30.0	30.2	16.1	4-2	I	9.0	3.8	4.4	1.1	629	4,0
Spanish	3.9	26.5	32.6	13.5	2.8	1	1.1	8.3	8.0	3.3	362	2.2
Italian	6.8	40.9	31.8	11.4	2.3	1	ļ	2.3	2.3	2.3	44	0.3
Classical Studies	10.9	39.1	35.9	7.8	1 :	1.6	1	1.6	3.1	- 1	64	0.4
Greek	21.1	15.8	47.4	5.3	5.3	1	1	5.3	Ι.	1	19	0.1
Hebrew	· !	1	66.7	33.3	I	1	1	1	1	ļ	3	0.0
Mathematics & Sciences												
Maths	5.4	10.3	13.4	8.7	0.3	6.0	23.0	21.2	10.2	1.2	16,552	99.4
Biology	6.1	26.3	32.2	18.4	1.9	0.3	4.4	6.3	3.6	9.0	8,902	53.5
Chemistry	9.7	22.7	27.6	23.6	2.8	1.0	3.6	5.2	3.2	9.0	5,877	35.3
Physics	11.2	23.1	24.3	17.2	4.0	6.0	5.1	7.5	5.6	1.2	5,537	33.3
Physics & Chemistry	6.8	26.5	34.1	15.4	4.3	0.1	3.3	5.1	3.4	1.0	828	5.0
Applied Maths	24.0	22.7	15.6	11.2	5.9	4.4	0.9	4.4	4.2	1.6	767	4.6
Agricultural Science	1.1	24.1	45.8	18.3	6.0	0.2	1.5	4.1	3.4	0.6	469	2.8
Mechanics	ı	Ι	66.7	Ι	i	33.3	I	I	I	I	е	0.0

TABLE 16 Cont'd.

EDUC/	ATIONA	LATTA	INMENT	, BY SUB	JECT, 0	F 1986 N	JEW HIG	ATIONAL ATTAINMENT, BY SUBJECT, OF 1986 NEW HIGHER EDUCATION ENTRANTS	UCATIO	N ENTR.	ANTS	
		HIG	HIGHER LEVEL	VEL			ΓO	LOWER LEVEL	VEL		TOTAL	-
	4	ω	ပ	Δ	Other	4	В	ပ	۵	Other	z	%
Business Studies												
Accounting	4.3	26.0	34.9	15.5	3,4	9.0	5.4	5.9	3.2	6.0	4,384	26.3
Business Organisation	4.6	14.9	42.4	21.6	2.5	1.1	3.7	5,0	3.6	9'0	3,942	23.7
Economics	5.1	21.3	31.7	19.7	3,5	0.8	5.3	6.3	5.3	1.1	2,761	16.6
Economic History	2.3	9.1	48.6	27.4	9.1	ı	0.6	1.1	1.1	9.0	175	1.1
Agricultural Economics	9.8	27.5	32.4	19.6	8	i	1.0	2.0	3.9	Ī	102	9.0
Technical Technical Drawing	2.6	12.9	24.0	17.9	4.4	3.8	13.2	12.0	7.8	1.4	1,963	11.8
Building Construction	0.6	17.2	45.0	15.9	0.5	6.0	3.2	11.0	5.8	0.5	774	4.6
Engineering Workshop T&P	2.2	32.1	38.2	5.4	0.3	1.2	7.8	10.5	2.2	0.1	735	4.4
Social Studies, Art & Music												
Home Econ S&S & General	2.3	18.0	43.9	26.5	2.8	6.2	1.6	2.9	1,7	0.1	5,245	31.5
History	6.0	21.4	34.9	19.6	2.6	1.9	5.5	4.6	2.9	9.0	4,969	29.8
Geography	5.9	18.2	43.6	19.0	1.1	0.8	3.0	5.1	3.1	0.3	5,615	33.7
Art	4.2	20.5	42.0	21.7	2.3	0.9	1,3	4.0	2.8	0.3	2,426	14.6
Musicianship A&B	2.2	11.7	43.4	33.6	4.2	I	0.1	2.2	2.6	· I	880	5.3

In the report on the 1980 survey it was suggested that it was possible that, for certain students, the amount of examination data provided in some of the colleges not affiliated to the CAO may have been less comprehensive than was the case in the CAO linked colleges. This could possibly arise where, in the knowledge that a certain minimum level of attainment guaranteed a place, a student may provide only a single examination record, whereas a composite record if available would indicate a slightly higher overall level of attainment. Since some differences between the two groups of colleges remain in the method of recording examination results, this discrepancy is still a possibility. However, by 1986 this possible source of error is even less likely and will not affect the results of this analysis.

Table 16 shows the number of new entrants who had taken each subject together with their highest level of attainment in the Leaving Certificate and/or Matriculation Examination. For comparative purposes it was hoped to juxtapose with this table information on the number of students taking each of the 32 subjects offered in the Leaving Certificate Examination together with the overall level of attainment in these subjects. This comparison would enable us to assess the extent to which third level entrants in 1986 are representative of the Leaving Certificate cohort. Regrettably no aggregate results of the 1986 Leaving Certificate Examination have been published. The most recent aggregate Leaving Certificate examination results available are those for 1984. These results have been tabulated in a form similar to that shown in Table 16 and reproduced in the Appendix (Table A18). Since it is known that the distribution of students by different levels of attainment in each subject does not vary widely from year to year, a comparison between the levels of attainment of the new entrants with those of the 1984 Leaving Certificate cohort provides an approximate comparative basis for assessing the relative academic attainment of the new entrants to higher education.

However, before attempting any comparison, Table 16 considered separately helps to provide an educational profile of new entrants to higher education. The penultimate column of this table shows the number of students who had taken each subject in the Leaving Certificate/Matriculation Examination and for whom information was available on the result achieved in these examinations. Only in the case of Irish was there any significant discrepancy between the number of students who were known to have taken the subject in these examinations and the number for whom information was available on the result achieved. Apart from the 15,547 students for whom a result was known there were an additional 232 students who had taken Irish but for whom no information was available on results in this subject. The first ten columns in Table 16 show the percentage distribution of students by level of attainment in each subject. The columns marked 'other' combine in single categories, for both higher and lower level papers, those who received E, F, and no grade. The final column in this table expresses the number of students who took each subject and for whom the result was known as a percentage of the total number of students for whom examination results were analysed.

It is clear from Table 16 that almost all students had taken English (99.7%), Mathematics (99.4%) and Irish (93.4%). Only two other subjects were taken by more than half of the students who were new entrants to higher education in 1986. French was taken by 77.4% while Biology was taken by 53.5%. Other subjects which had a high take-up rate were Chemistry (35%), Geography (34%), Physics (33%), Home Economics (both programmes combined 31.5%), History (30%), Accounting (26%) and Business Organisation (24%). Hebrew and Mechanics were each taken by only three students. Other subjects which were taken by only a small percentage of new entrants were Greek (0.1%), Italian (0.3%), Classical Studies (0.4%) and Latin (4%).

The second element of the educational profile of new entrants which is shown in Table 16 is the percentage distribution of students by highest level of attainment in each of these subjects. The pattern shown is one of considerable diversity. In only three subjects did more than 10% of new entrants attain a grade of A in a higher level paper; these were Applied Mathematics (24%), Greek (21%, only 4 students) and Physics (11%). In all but four subjects the modal level of attainment of new entrants was grade C on a higher level paper. In the case of Mathematics, grade B on a lower level paper was the level attained by the largest percentage (23%), while grade B on a higher level paper was the modal level of attainment in Classical Studies (39%) and Italian (41%). In Applied Mathematics the modal level of attainment was grade A on a higher level paper. The subjects in which large percentages of new entrants had grades on lower

level papers were Mathematics (62%), Irish (48%), French (28%) and English (24%).

When we compare the distribution of new entrants by subjects taken in the Leaving Certificate/ Matriculation examinations with that of the total 1984 Leaving Certificate cohort we note that the pattern of differential take-up of subjects is broadly similar. The same five subjects, English, Mathematics, Irish, French and Biology have the highest percentage take-up rate in both populations. Some differences are evident. For example, within the language group of subjects, significantly larger percentages of new higher education entrants had French, German and Latin than was the case for the total Leaving Certificate cohort. Similarly within the science group of subjects Physics, Chemistry and the combined subject Physics and Chemistry had a higher take-up rate among the higher education entrants. In contrast, Business Organisation, Geography, Art, Home Economics and Building Construction had a higher take-up rate among the total Leaving Certificate cohort.

Much larger differences between the two populations are evident when we examine the level of attainment in each subject. Predictably, the new entrants have significantly higher levels of attainment in almost all subjects. These differences are immediately evident when we look at attainment levels in the five most widely chosen subjects. In the case of English, Irish and French the modal level of attainment for the Leaving Certificate cohort was Grade D on a lower level paper in contrast to Grade C on a higher level paper for the new higher education entrants. The modal attainment level in Mathematics for the total Leaving Certificate cohort was also Grade D on a lower level paper, compared to Grade B on a lower level paper for the new entrants. The differences are less extreme in the case of Biology where Grade C on a higher level paper is the modal attainment level for both populations. However, more than 32% of the new entrants have a Grade B or higher on a higher level paper compared to less than 9% of the total Leaving Certificate cohort.

Returning to our exclusive focus on the new entrant the main objective in the analysis of Leaving Certificate/Matriculation Examination data was to identify the level of prior educational attainment of the new entrants. A second objective of this analysis was to monitor changes between 1980 and 1986 in the educational attainment of third-level entrants. The measure of differential attainment used here corresponds to that used in the report on the 1980 survey. It is based on the number of subjects in which students achieved grade C or higher on a higher level paper. The distribution of students by type of higher education college on this measure of attainment is presented in Table 17. Perhaps the most striking feature of this distribution is the wide range of student attainment. Less than 8% of new entrants had no subject with a grade C or higher on a higher level paper (henceforth, referred to as "grade C or higher"), while 2.5% of students had eight or more subjects with this level of attainment. The largest percentage (14.1%) of new entrants had four subjects at this level while almost as many students had six subjects (13.7%), three subjects (13.7%); and five subjects (13.5%) with this level of attainment.

Significant differences are evident in the level of attainment of entrants to the different types of third-level college. The modal level of attainment of new entrants to the university sector was seven subjects with grade C or higher although just one per cent fewer (22%) had six subjects with this level of attainment. The distribution by level of attainment of new entrants to the NIHEs is very similar to that for the universities. Indeed, the NIHEs have a higher percentage of their new entrants with six (29%), seven (23%) and five (22.5%) subjects with grade C or higher. The NIHEs have a lower percentage (7.1%) of their entrants with less than four subjects with grade C or higher than the universities (14.3%), while the percentage of new entrants with eight or more subjects with grade C or higher is greater in the universities (5.6%), than in the NIHEs (3%)

The modal level of attainment of new entrants to the DIT was to have four subjects with grade C or higher. This was the situation of 20% of its entrants while a further 18% had three subjects at this level. Nine per cent of entrants to the DIT had no subject with a grade C or higher while a further 14% had one subject at this level. The largest percentage of entrants to the RTCs (23.3%) had two subjects with grade C or higher, while almost as many students (22.8%) had one subject at this level. Eighteen per cent of entrants had three subjects with Grade C or higher while a further 17.6% had no subject at this level. The largest percentage (29%) of new entrants to the Colleges of Education had six subjects with grade C or

TABLE 17

DISTRIBUT	ION OF I	NEW EN	TRANT AND B	S BY L Y TYPI	EVEL OF	PRIOR LEGE	ACADI	EMIC
Number of	Uni- versities	NIHE	DIT	RTC	Coll. of Education	Other Colleges	тот	AL
Honours*	%	%	%	%	%	%	%	N
0	0.2	0.0	9.3	17.6	1.0	6.7	7.8	1,299
1	0.3	0,0	13.9	22.8	2.0	21.3	10.7	1,777
2	4.0	1.7	14.2	23.3	2.7	18.9	12.4	2,052
3	9.8	5.4	18.3	18.2	10.1	13.7	13.7	2,279
4	15.6	14.8	19.7	10.1	16.4	14.0	14.1	2,344
5	18.7	22.5	14.4	4.6	26.4	10.4	13.5	2,246
6	22.4	29,3	7.1	2.3	29.0	9.5	13.7	2,281
7	23.4	23,3	2.8	0.9	10.7	5.2	11.5	1,918
8	5.0	2.7	0.2	0.1	1.6	0,3	2.2	367
9	0,6	0.4	0.1	0.0	0.2	0.0	0.3	47
10	0.0	0,0	_	0.0	0.0	0.0	0.0	3
TOTAL %	100	100	100	100	100	100	100	_
TOTAL N	6,121	1,118	2,113	6,032	901	928		16,613

^{*} Honours = Grade C or higher on higher level paper.

higher. A further 26% had five subjects while 16% had four subjects at this level. Of the new entrants to the 'other colleges' category the largest percentage (21%) had one subject with grade C or higher while a further 19% had two subjects at this level.

Detailed information on the distribution of new entrants by level of attainment within each college is provided in the Appendix (Table A19). Within the university sector, the level of attainment of new entrants to St Patrick's College, Maynooth represents the main departure from the general pattern. Here the largest percentage (30%) of new entrants had three subjects with grade C or higher. In contrast, the modal level of attainment in three of the other colleges was to have seven subjects with grade C or higher, while in TCD and in UCG the largest percentage of new entrants had six subjects at this level.

Within the NIHEs new entrants to the Dublin college tend to have higher levels of prior educational attainment. Here the largest percentage (40%) of new entrants had six subjects with grade C or higher while in NIHE Limerick the modal level of attainment was five subjects at this level. Within the Colleges of Education sector, more than 50% of the new entrants had six or more subjects with grade C or higher in three of the colleges, St Patrick's, Mary Immaculate and St Mary's, Marino. Levels of prior academic attainment were somewhat lower in each of the other colleges.

Within the colleges of the DIT, the levels of prior academic attainment were highest in the College of Commerce, Rathmines and in the College of Technology, Kevin Street. In both colleges the modal level of attainment was to have four subjects with grade C or higher. Each of the other DIT colleges admitted a significant number of students with less than two subjects at this level.

Some differentials in the educational attainment of new entrants are also evident between the RTC colleges. For five of these colleges, Athlone, Cork, Sligo, Tralee and Waterford the modal level of attainment was to have two subjects with grade C or higher. In the case of Carlow, Dundalk, Letterkenny and CoACT the largest percentage of new entrants had one subject at this level, while in Galway the modal level of attainment was to have three subjects at this level.

The final five 'other colleges' shown in Table A19 also reveal substantial differentials in the level of prior academic attainment of their new entrants. In the College of Industrial Relations the largest percentage (28%) of new entrants had six subjects with grade C or higher, while in the Shannon College of Hotel Management the modal level of prior academic attainment was to have two subjects at this level. In the three Colleges of Art the modal level of attainment at entry was to have one subject with grade C or higher. However, new entrants to the NCAD had a greater percentage of their new entrants with higher levels of attainment.

As was the situation in respect of socio-economic status, some of the differential between colleges in the academic attainment of new entrants is related to the distribution of fields of study between these colleges. This relationship between level of prior academic attainment and field of study is shown in the Appendix. In respect of HEA-designated colleges (Table A20) the highest levels of attainment were found in the professional faculties. The percentage of new entrants with seven or more subjects with grade C or higher was 94% in Veterinary Medicine, 68% in Medicine, 66% in Law, 61% in Dentistry and 59% in Architecture. For the other fields of study in these colleges the modal number of subjects with grade C or higher was: seven for Engineering, six for Communications and Information Studies, Commerce, Science, Social Science and Economic and Social Studies; five for European Studies and Agricultural Science and Forestry; four for Arts, Dairy Science and Education; and one for Art and Design.

The level of attainment by field of study for non HEA designated colleges is presented in Table A21. The higher level of attainment of new entrants to Education represents the most significant departure from the general pattern. For the other fields of study in these colleges the modal number of subjects with grade C or higher was: three for Science and Hotel, Catering and Tourism; two for Business, Administrative and Secretarial Studies and Computer Studies; and one for Art and Design, General Engineering and Construction Studies. The largest percentage (22%) of new entrants to General Studies had no subject with this level of attainment.

The distribution of new entrants by level of prior academic attainment reveals some gender differentials. In general, female new entrants had higher levels of prior academic attainment (Table 18). Almost 30% of female new entrants had six or more subjects with Grade C or higher, while 26% of male new entrants had this level of attainment. In addition, only 14.5% of female new entrants had less than two subjects with grade C or higher, while 22% of male new entrants had this level of attainment.

Since this study is a replication of the 1980 survey it is possible to monitor changes in the prior academic attainment of new entrants. Table 19 summarises, by type of higher education college, changes between 1980 and 1986 in the percentage distribution of new entrants by level of prior educational attainment. The five colleges which form the 'other colleges' category in this report are not shown separately in this table since there was no corresponding category in the earlier report. However, the distribution in these colleges is included in the total column. Table 19 clearly demonstrates a significant rise in the level of prior academic attainment of new entrants to higher education between 1980 and 1986. The final column in this table presents the overall pattern. When the percentage distribution of new entrants by level of prior academic attainment in 1986 was compared with the 1980 distribution it was observed that only 7.8% of the 1986 cohort had no subject at grade C or higher compared to 12.2% of the 1980 cohort. This gives a reduction of 4.4% in the percentage of new entrants with this level of educational attainment. There was also a reduction in the percentage distribution of new entrants with one, two, three and four subjects at this level. The reduction in these five lower levels of attainment is compensated for by an increase in the percentage distribution of new entrants with five, six, seven, eight and nine subjects at grade C or higher. The apparent anomaly in respect of those with ten subjects at this level does not alter the overwhelming trend. Only 6 students had ten subjects at this level of attainment in 1980 compared to three students in 1986.

DISTRIBUTION OF N	IEW ENTRANTS E ATTAINMENT A		IOR ACADEM
Number of	Male	Female	TOTAL
Honours*	%	%	%
0	10.2	5.2	7.8
1 .	12.0	9.3	10.7
2	13.4	11.3	12.4
3	13,1	14.4	13.7
4.	13.2	15.1	14.1
5	-12.1	15.1	13,5
6	12.7	14.8	13.7
7	11.1	12.0	11.5
8	1.9	2.5	2.2
9	0.2	0,3	0.3
10	0.0	0.0	0.0
TOTAL %	100	100	100
TOTAL N	8,644	7,969	16,613

^{*}Honours = Grade C or higher on higher level paper.

The pattern of change shown in the final column based on the analysis of the two cohort totals is reproduced within each of the five college types. The greatest change in the percentage distribution of new entrants by level of prior academic attainment occurred in the NIHEs. Between 1980 and 1986 there was a reduction of 50% in the percentage of new entrants with less than five subjects with grade C or higher. In the case of the DIT colleges there was a reduction of 24% in the percentage of new entrants with less than three subjects at this level while the RTCs show a reduction of 16% in the percentage of new entrants with less than two subjects with this level of attainment. The pattern of change was similar for the Colleges of Education where there was a reduction of 19% in the percentage of new entrants with less than five subjects at grade C or higher level, although there was an increase of almost 2% in the percentage of new entrants to this sector who had less than two subjects with this level of attainment. Finally, between 1980 and 1986 the universities also showed a rise in the level of attainment of new entrants. There was a reduction of 14% in the percentage of new entrants with less than six subjects at this level.

CHANGES BETWEEN 1980 & 1986 IN THE PERCENTAGE DISTRIBUTION OF
NEW ENTRANTS TO HIGHER EDUCATION, BY LEVEL OF PRIOR EDUCA-
TIONAL ATTAINMENT, & BY TYPE OF HIGHER EDUCATION COLLEGE**

Number of Honours*	Uni	NIHE	DIT	RTC	College of Ed.	TOTAL
0	-0.3	-3.0	-7.5	-13.2	+0.4	-4.4
1	-0.4	-8.8	-6.1	-2.6	+1.2	-0.8
2	-4.9	-15.0	-10.0	+3.0	-3.2	-2.2
3	-4.9	-16.5	+0.2	+5.8	-7.5	1.6
4	-3.9	-7.0	+8.1	+4.1	_ 10.2	-1.1
5	-0.0	+6.7	÷8.1	+1.4	+1.9	+0.9
_ 6	+4.0	+20.8	+5.1	+1.0	+10.3	+3.4
7	+8.8	+20.5	+1.9	+0.4	+5.6	+4.7
8	+1.5	+2,0	+0.1	. –	+1,2	+0.7
9	+0.2	+0.4	+0.1	_	+0.2	+0.1
10	-0.1		_	_		-0.0

^{*} Honours = Grade C or higher on higher level paper.

Number of Examination Years

In view of the growing competition for places and the increase in the level of attainment necessary to secure a place, many students repeat the Leaving Certificate in order to improve their competitive position. In the present study information was sought on the number of years in which students sat the Leaving Certificate and/or Matriculation Examination. It was found that, in all, 76% of new entrants had sat the Leaving Certificate and/or Matriculation Examination in only one year. Twenty two per cent sat these exams on two separate years, while a further one per cent sat these examinations on three separate years. A further one per cent of the new entrants had examination results for more than one year but it was not possible to establish how many additional years were in question. At least 19 students had Leaving Certificate and/or Matriculation results from four separate years while at least two students had results from five different years. In the subsequent analysis in this section it is proposed to differentiate between those who had only one year's examination from those students who had more than one year's examination results.

Table 20 shows the distribution of new entrants by college type differentiating between those with one year's examination results and those with examination results for more than one year. It was found that 28.5% of new entrants to the DIT, 28% of new entrants to the universities and 27% of new entrants to the NIHEs had examination results from more than one year. The corresponding percentages for the other college types were 20% for the Colleges of Education, 18% for the RTCs and 13% for the 'other colleges'.

^{**} This table was derived by subtracting the percentage distribution of the 1980 new entrants by level of prior academic attainment and by type of higher education college from the distribution shown in Table 17 in the present study.

The detailed figures for each individual college are included in the Appendix (Table A22). Within the university sector the highest percentage (41%) of new entrants with examination results for more than one year was in TCD. Relatively high percentage figures were also found in RCSI (39%), St Patrick's College, Maynooth (35%) and UCG (28%) while the lowest percentages of students in this category were found in UCC (22%) and UCD (22.5%).

TABLE 20

	Leaving Certificate/Matriculation Examinations					
College Type	One Year	More than one Year	TOTAL			
	%	%	%	N		
Universities	72.2	27.8	100	6,324		
NIHEs	73.2	26.8	100	1,118		
DIT	71.5	28.5	100	2,121		
RTCs	81.9	18.1	100	6,072		
Colleges of Education	80.1	19.9	100	903		
Other Colleges	89.9	13.1	100	335		
TOTAL	76.4	23.6	100	16,783		

The two NIHE colleges did not differ in the percentage of students with more than one year's examination results. Within the Colleges of Education sector the highest percentage of students in this category was found in St Mary's, Marino (39%), while the lowest percentages were found in Mary Immaculate College, Limerick (8%) and St Angela's, Sligo (14%). Within the colleges of the DIT the highest percentages of students with more than one year's examinations were in the College of Marketing and Design (32%) and in Kevin Street College of Technology (31%).

Within the RTC sector the highest percentages of new entrants with more than one years' examinations were in Galway and Letterkenny, both having 24% in this category. In contrast, the lowest percentage of students in this category were found in Tralee (11%) and Carlow (12%). Finally, in the 'other colleges' category, very low percentages of students with more than one examination were enrolled in Crawford Municipal School of Art (6%), Dun Laoghaire School of Art and Design (6%) and the College of Industrial Relations (8%).

The percentage of students with more than one year's examination is related to the third level field of study. This relationship is demonstrated in the Appendix. In respect of HEA designated colleges (Table A23) the highest percentages of students with more than one year's examination were found in Economic and Social Studies (47%), Veterinary Medicine (43%) and Dentistry (38%). The lowest percentages of students in this category were in Communications and Information Studies (16%), Art and Design (22%) and Engineering (23%).

The field of study differentials in the percentage of students with more than one year's examination are considerably less in the non HEA designated colleges (Table A24). With the exception of Art and Design at 15% and General Studies at 28%, the percentage of students with more than one year's examination lies within the 19 - 23% range.

Predictably, there is a relationship between the overall level of prior academic attainment and the number of years in which examinations were taken. Thirty three per cent of students with eight or more subjects at grade C or higher level had more than one year's examination while fewer than 18% of those with less than two subjects at this level had taken examinations in more than one year. However, as Table A25 demonstrates, this relationship is not as strong as might have been anticipated. It is possible that a more discriminating measure of academic attainment, which differentiates between A, B, and C grades might reveal a stronger relationship.