

VOCATIONALISM IN IRISH SECOND-LEVEL EDUCATION

Mary Lewis and Thomas Kellaghan
Educational Research Centre
St Patrick's College, Dublin

Growth in vocationalism in second-level schools in Ireland between the late 1960s and the 1980s is examined in the context of four expressions of such a trend: enrolment in vocational schools, the percentage of students in senior cycle enrolled in vocational courses, the take-up of vocationally-oriented subjects in second-level curricula (expressed by the number taking examinations in the relevant subjects), and the development of programmes to prepare students for employment. Information on these topics is based on Department of Education statistics, project documentation, and published research. Between 1967 and 1982, vocational schools lost their share of junior-cycle students (28.8% in 1967; 24.2% in 1982) but increased considerably their share of senior-cycle students (9.9% in 1967; 23.3% in 1982). The percentage of senior-cycle students taking vocational courses was fairly constant up to 1982 but increased thereafter, particularly in secondary schools. In the Group Certificate examination between 1969 and 1983, nine vocational subjects showed a greater growth and five subjects a lesser growth than the increase in the number of students sitting for the examination (37.8%). In the case of the Intermediate Certificate examination, all vocationally-oriented subjects, with one exception (Home Economics for girls), showed an increase in participation between 1969 and 1983 which was greater than the increase in total numbers taking the examination (82.8% for boys and 73.4% for girls). At Leaving Certificate level, there was an increase between 1971 and 1983 in either male or female participation in all vocationally-oriented subjects which exceeded the overall increase in the numbers taking the examination (106.3% for boys and 115.1% for girls). Numbers enrolled in work- preparation courses have risen considerably since they were introduced in 1977. While these data indicate that there has been an increase in vocationalism in Irish second-level schools, many students are still not involved in any vocationally-oriented subjects and, for most of those who are, the form of vocational education to which they are exposed is very broad (prevocational) rather than specific.

The vocationalization of secondary education has been identified as a major theme in education since 1975 (5, 7, 18, 44). In a majority of western European countries, the expansion of upper secondary education in the late 1970s has increased the weight of the technical/vocational sector within the

total provision (50) Two, not unrelated, explanations have been offered for this growth an increase in the number of students staying at school after the compulsory period of education and a high rate of youth unemployment Both these conditions applied in Ireland in the 1970s and 1980s The number and proportion of young people receiving full-time education increased (see 30, 34) while at the same time, as a result of economic recession, there was a marked increase in unemployment in general and youth unemployment in particular (see 2, 56), a situation that was paralleled in other countries (see 47, 49)

In this paper, we shall examine the extent to which expansion in educational participation between the late 1960s and the 1980s has been matched by an increase in vocationalism in schools We shall examine vocationalism in the context of four expressions of such a trend enrolment in vocational schools, the proportion of students in senior cycle following vocational courses, the take-up of vocationally-oriented subjects in second-level curricula as indicated by the number of students taking examinations in vocationally-oriented subjects, and the development of programmes to prepare students for employment Where the relevant evidence is available, we shall consider the content of vocational education on offer Information on programme content and participation is based mostly on Department of Education and pre-employment programme documentation In some cases, the findings of research are available which add to that information as well as providing information on the characteristics of students who enrol in vocational courses Before presenting our data, we shall provide an outline of Irish government policy relating to vocational education which may reasonably be expected to have resulted in an increase in vocationalism in schools

POLICY ON VOCATIONAL EDUCATION

Up to the 1960s, second-level education was provided in two types of school secondary and vocational¹ The curriculum in secondary schools was

¹ The present system of vocational education is based on the provisions of the Vocational Education Act of 1930 Prior to 1930, there were a number of technical schools in the country (in 1924 25, there were 65) but these served older students (16 years +) and mostly on a part time basis The Technical Education Commission of 1926 27 regarded existing facilities for technical education as inadequate and recommended the setting up of a system of practical continuation education for students aged between fourteen and sixteen years (6)

mainly classical-academic and prepared students for third-level education and white-collar occupations. It did, however, include a number of subjects that are sometimes described as vocational and sometimes as practical: *Drawing, Woodwork, and Commerce* at junior cycle and *Home Economics and Commerce* at senior cycle (27). The curriculum in vocational schools was designed to continue and supplement education provided in elementary schools and included general and practical training in preparation for employment (continuation education).²

The curricula of the two types of school were reflected in the state-examination structure. In secondary schools, students were prepared for two examinations. The first (the Intermediate Certificate), taken at about 15 or 16 years of age (usually after three years of secondary schooling), was designed 'to testify to the completion of a well-balanced course of general education suitable for pupils who leave full-time education at about 16 years of age or, alternatively, to the fitness of the pupils for entry on more advanced courses of study' (27, p.23). The second examination (the Leaving Certificate) was designed to testify 'to the completion of a good secondary education and to the fitness of a pupil to enter on a course of study at a university or an educational institution of similar standing' (27, p.27). It will be noted that there is no reference to vocational preparation in either statement.

These two examinations could not be taken by students in vocational schools, in which there was only one state examination, the Day-Group Certificate examination, usually taken after two years of vocational education. The Day-Group examination was not available to students in secondary schools. In the examination, five groups of core subjects, leading to a specific employment goal, were offered, together with a number of general subjects.

In the 1960s, a series of government policy statements was made on the role of education in meeting the economic needs of the country and, in

² Vocational schools also provided technical education to prepare people for particular employments and to improve the skills of those already employed. A great deal of such education was craft-based. It was mainly conducted in evening classes, though there were also some whole-time schemes (6). Such education is not considered in this paper.

particular, the need to provide students with technical and other applied skills. For example, the Minister for Education, Dr Hillery, pointed out in 1963 that technical education

would give the country a systematic supply of youth with a sufficient technical education to become at a later stage the technicians and higher technicians the country is, as we must hope, going to need (46, p 126)

The importance attached to economic factors in proposing educational reform was complemented in official policy statements by a concern to improve equality of opportunity as a step to achieving greater equity in the distribution of educational and economic benefits (16, 43)

The promotion of vocational education draws support from the work of human-capital theorists, who encouraged the expansion of the educational system in the belief that high levels of skill would make for more rapid economic growth. There is also evidence in official policy statements that the belief existed that schools could help solve national economic problems by responding to changing needs in the labour market. Some have gone further and assigned the major responsibility to education for the employment problems of young people. These views represent a growth in a utilitarian view of education, a view that has a longer tradition in the United States than in Europe (see 23)

Policy statements were accompanied by a number of initiatives which had relevance for vocational education. Comprehensive schools (and later community schools) were established alongside the existing structure in 1966 and common courses were made available in secondary and vocational schools. Examinations which previously had been confined to schools of one type were made available to all types of school, also in 1966. It was hoped that the reforms would result in a widening of the range of subjects available in all second-level schools and, in particular, that a greater emphasis would be placed on technical, practical, and vocationally-oriented subjects. The new policy (if successful) would involve a move away from the structure of second-level education which had been established in the 1930s, in which a system of vocational schools paralleled the general system, to a system of diversified secondary schools in all of which a number of vocational (or perhaps more accurately prevocational or practical) subjects would be provided in addition to traditional academic courses. There has been little

by way of systematic effort to examine the impact of the new policy on schools in terms of subject provision or student choice of subjects.

One thing that is clear is that there was not a great deal of change in regulations governing curricula or examinations which might have encouraged the desired changes. Some curricula were revised and some subjects were added to provide a total of 26 approved subjects at the Intermediate level and 33 at the Leaving Certificate level (29). Metalwork was the only really new vocationally-oriented course added (in 1969) at the Intermediate level, while at the Leaving Certificate level, vocationally-oriented subjects which were added in 1971 included Engineering Workshop, Building Construction, Business Organization, Accounting, and Home Economics. (Subjects covering areas cognate to some of these subjects - e.g., Commerce, Domestic Science - had been available up to 1970.)

Basic regulations regarding students' choice of subjects did not change much. Four subjects remained compulsory at junior cycle in secondary schools: Irish, English (in place of 'a second language'), History and Geography (combined), and Mathematics. The regulations were somewhat different for students taking the Intermediate Certificate in vocational and comprehensive schools; these students were permitted to substitute another subject for History and Geography. At senior cycle, in addition to taking Irish, it was recommended that students should take at least three subjects from one group of five groups of subjects (languages, sciences, business studies, applied sciences, and social studies) and at least two subjects from outside the group (29). There is no evidence that students followed this advice.

More recent policy statements reinforced earlier ones but were directed more to the need to develop alternative curricula in post-compulsory education than to the reform of traditional curricula, as earlier statements had been. They showed a greater concern for the education-work nexus and for students who were performing poorly in the system and who had poor employment prospects. For example, policy documents such as the *Programme for action in education, 1984-1987* (24) and *Building on reality* (25) gave as major policy objectives seeking 'to achieve a closer relationship between education and modern society and between education and the world of work' (25, p.91). Emphasis was also placed on achieving 'much greater real equality of opportunity in education' and on 'providing special help for

the disadvantaged within the system' (25, p 91) The need for paying special attention to under-educated and disadvantaged young people was also stressed in the OECD (49) review of youth employment opportunities in Ireland In general, the report of the review (undertaken in 1982) was critical of the preparation of school leavers for working life at the time In particular, it pointed to inadequacies in the career-guidance service in schools, to the limited scale on which pre-employment courses were offered, and to stereotyping in educational provision for girls which was likely to limit their career options

A problem in considering vocationalism in education is the fact that the term vocational education can be used in a variety of ways At its broadest, it may be defined as any programme which imparts knowledge, skills, and attitudes which are designed to develop occupational competence among students Defined in this way, all compulsory education may be regarded as being to some extent vocational since it 'has always had, as a primary goal, preparation for a full adult life in work, leisure, family and community' (48, p 16) The vocational importance of post- compulsory academic education should not be ignored either Its strength and popularity probably owe much to the fact that it is perceived as providing access to occupations of greatest prestige (15)

Vocational education, as the term is normally used, can be contrasted with general education in that it tends to be 'oriented towards employment or makes people more employable in one group of occupations than another Unlike general education it has a single point of reference work' (50, p 92) Thus, education that is called vocational is more externally defined than is general education, being based primarily on the perceived needs of employers and the work situation In practice, however, vocational education has a variety of meanings and is expressed in many ways To complicate matters further, a variety of other terms - industrial education, technical education, manual education, career education - may be used more or less synonymously for vocational education while the concept is also closely related to such concepts as training, curriculum diversification, curriculum relevance, and transition from school to work (see 19) This makes it difficult to make precise estimates of the extent of vocationalism in Irish education For the most part in this paper we have to accept as vocational that which is officially described as such though we will attempt to assess the extent to

which education so described provides job-specific skills or a general preparation for the world of work.

VOCATIONALLY-ORIENTED SCHOOLS

In this section, we will examine participation rates in vocational schools over the period 1967 to 1982, and the characteristics of students attending them.

Although official documentation on the operation of vocational schools is sparse, a number of comments based on observation of the system may be made. First, following the recommendations of a Department of Education memo (26), which provides an interesting early example of an attempt to match education to labour-market requirements, schools were exhorted to select courses which represented the distribution of occupations in their area. And second, the degree of specificity of the vocational preparation provided in vocational schools varied with the type of course the student was enrolled in. In continuation courses which catered for most of the students enrolled in junior cycle, it tended to be general: students followed a course which, while it included some academic and literary subjects, de-emphasized these in favour of subjects of a practical and vocational nature such as commerce and woodwork (43). Courses in which the vocational focus was much more specific (e.g., secretarial courses) were also provided in vocational schools.

Following the establishment of common courses and a common examination structure in secondary and vocational schools in 1966, differences in degree of vocationalism between the two types of school should have decreased. However, one would expect that established traditions in the schools would have continued to influence curricular practice.

The data in Tables 1 and 2 allow us to compare growth in vocational schools with growth in other types of Irish second-level schools between 1967 and 1982.³ Over the period, at junior-cycle level, the overall increase was

³ Our starting date (1967) for the information in Tables 1 and 2 differs from the starting dates for the examination statistics in Tables 3, 4, and 5. It would have been preferable if the same period could have been covered in all tables. However, this was not possible because of lack of consistency in the statistics provided in Department of Education reports. Between 1968-69 and 1971-72, separate statistics were not provided for junior and senior cycles.

57% (Table 1), while at senior cycle it was 200% (Table 2), the greatest increases occurring between 1972 and 1977. Comprehensive schools, which had just been established in 1966, show by far the greatest growth at both levels. Growth in vocational schools was less than in secondary schools at junior-cycle level (almost three-quarters of secondary-school growth), while in senior cycle, it considerably exceeded growth in secondary schools, being almost five times greater.

TABLE 1

CUMULATIVE PERCENTAGE INCREASES IN THE NUMBERS OF STUDENTS RECEIVING FULL-TIME JUNIOR CYCLE SECOND LEVEL EDUCATION BY TYPE OF SCHOOL, 1967-82

Type of school	1967-68	1972-73	1977-78	1982-83
	N	Percentage Increase		
Vocational	37,601	28.25	31.12	31.98
Secondary	92,079	23.72	41.38	44.69
Comprehensive/ Community	843	379.24	1,641.76	2,564.53
Total	130,523	27.32	48.76	57.30

TABLE 2

CUMULATIVE PERCENTAGE INCREASES IN THE NUMBERS OF STUDENTS RECEIVING FULL-TIME SENIOR CYCLE SECOND LEVEL EDUCATION BY TYPE OF SCHOOL, 1967-1982

Type of school	1967-68	1972-73	1977-78	1982-83
	N	Percentage Increase		
Vocational	3,579	153.31	436.38	603.69
Secondary	32,327	54.55	99.59	126.94
Comprehensive/ Community	125	856.80	4,329.80	7,684.80
Total	36,021	67.59	147.14	200.60

Figures from 1972-73 onwards include numbers in annual statistics categorized as following: general, secretarial, pre-employment, and technical courses.

The changes in vocational-school attendance can be viewed another way by considering the proportion of second-level students enrolled in vocational schools. In 1967, at junior cycle, it was 28.8 percent. By 1982, that percentage had decreased to 24.2. The figures at senior cycle reveal the opposite trend. In 1967, only 9.9% of students at this level were in vocational schools. By 1982, the percentage had increased to 23.3. Thus, vocational schools lost their share of junior-cycle students but increased considerably their share of senior-cycle students between 1967 and 1982.

A certain amount of information is available on the characteristics of students who attend vocational schools. This relates to gender, ability/achievement, and socio-economic background. At junior-cycle, more boys than girls attend vocational schools. In 1967, for example, while the numbers of boys and girls in junior cycle in all types of school were approximately equal, 62.6% of students in the junior cycle of vocational schools were boys (28). By 1982, the percentage of boys at this level in vocational schools had increased to 68.7 (33). The picture is somewhat different at senior cycle, in which girls outnumber boys. In 1967, 52.6% of senior-cycle students were girls and by 1982, the figure had increased to 56.5 percent. Girls' over-representation in senior-cycle second-level education is reflected in their representation in vocational schools. The percentage of senior-cycle students in vocational schools who were girls was 52.8% in 1967 and 55.6% in 1982.

A number of studies provide evidence that students who go to vocational school on the completion of primary education, compared to students who go to other types of school, have performed less well scholastically at primary school, have lower scores on standardized tests of scholastic ability and achievement, and are of lower socio-economic status. They also tend to leave school early (16, 54).

STUDENTS ENROLLED IN VOCATIONAL COURSES

The data we considered in the last section provide information only about growth in different types of school. However, students in vocational schools can follow general academic courses (in preparation for the Leaving Certificate examination) and students in secondary schools as well as in vocational schools can follow vocational courses during senior cycle or following the Leaving Certificate examination. The data we have considered

do not reflect these differences. To obtain information on the type of course (vocational or general) taken by students we turn to data that have been provided in Department of Education reports since 1977-78. The data refer to the numbers of students following general and vocational courses during the senior cycle (including post-Leaving Certificate students) in schools of different types. In Table 3, we present data for 1977-78, 1982-83 (the final year in the other analyses presented in this paper), and 1986-87 (two years

TABLE 3

NUMBERS OF STUDENTS AND THE PERCENTAGE OF THOSE STUDENTS FOLLOWING VOCATIONAL COURSES IN SENIOR CYCLES OF SCHOOLS OF DIFFERENT TYPES FOR THE YEARS 1977, 1982 AND 1986

Type of school		1977		1982		1986	
		N ¹	% vocational ²	N ¹	% vocational ²	N ¹	% vocational ²
Secondary ³	M	27,887	0.37	31,120	0.05	35,248	3.03
	F	36,324	0.75	42,253	1.06	46,408	6.03
	T	64,211	0.58	73,373	0.63	81,656	4.73
Vocational	M	8,408	22.59	11,174	21.81	15,598	30.21
	F	10,789	61.22	14,011	56.68	16,685	55.09
	T	19,197	40.30	25,185	41.21	32,183	43.11
Community/ Compre hensive	M	2,481	10.04	4,769	10.61	6,760	10.67
	F	3,135	19.43	4,972	18.69	6,822	16.80
	T	5,616	15.28	9,741	14.73	13,582	13.75
Other ⁴	M	235	57.45	361	99.45	254	99.61
	F	835	93.05	416	93.75	340	91.77
	T	1,070	85.23	777	96.40	594	95.12
Total	M	39,011	6.12	47,424	7.0	57,760	11.64
	F	51,083	16.17	61,652	15.74	70,255	19.14
	T	90,094	11.82	109,076	11.94	128,015	15.76

¹ N is the total number of students in a particular type of school

² Vocational includes students taking secretarial, pre-employment, and technical courses. By subtracting the figure given for % vocational from 100, one can find the percentage following general education courses.

³ Secondary includes 'secondary top' students (i.e. those in the secondary department of a primary school).

⁴ Other includes preparatory and regional technical college students.

after the introduction of Vocational Preparation and Training Programmes, data for which became available after the other analyses for this paper had been completed). From Table 3 we can see that the percentage of students following vocational courses in the senior cycle of second-level schools remained fairly constant between 1977 and 1982 but increased from 11.94 to 15.76 between 1982 and 1986.

The greatest proportion of students enrolled in vocational courses is to be found in schools classified as 'other' in Table 3. This is not surprising since this category includes regional technical colleges. However, the number of students attending senior-cycle courses in these institutions is small. Apart from this category, the largest percentage (over 40) enrolled in vocational courses are to be found in vocational schools. The percentage increased slightly between 1977 and 1986. Community/comprehensive schools have a smaller percentage of students involved in vocational education than have vocational schools. In these schools, the percentage decreased somewhat between 1977 (15.28%) and 1986 (13.75%).

Secondary schools, which have by far the largest numbers of students enrolled in senior-cycle courses, have the lowest percentage of students following vocational courses. However, the increase in percentages of students taking vocational courses has been greater in secondary schools than in any other type of school. The increase was modest between 1977 and 1982 (from 0.58% to 0.63%) but was more than seven-fold (from 0.63% to 4.73%) between 1982 and 1986. The latter increase reflects the introduction of Vocational Preparation and Training programmes to secondary schools.

Differences between the genders in involvement in vocational education are considerable. Overall, in all types of school (with the exception of the schools included in the 'other' category of Table 3), and in each year, a greater percentage of female students than of male students was enrolled in vocational courses. The difference is almost entirely accounted for by the number of females who took secretarial courses. In fact, most girls in vocational education at senior cycle are taking a secretarial course.⁴

⁴ For example, in 1977-78, of the 8,262 females following vocational courses, 6,974 were taking secretarial courses (31). In 1986-87, of 13,446 in vocational education, 7,392 were taking secretarial courses (37). The figures for males were: in 1977-78 out of 2,387 in vocational education, 85 were taking secretarial courses; in 1986-87, out of 6,725 in vocational education, 215 were taking secretarial courses.

The female-male differential was greater in vocational than in secondary schools in 1977 but had narrowed by 1986. Between these years, the difference between the percentage of females and the percentage of males enrolled in vocational courses in vocational schools had decreased from about 3 to 1 to less than 2 to 1. In secondary schools, the gender difference over the same period remained fairly constant, in both 1977 and 1986, the percentage of females taking vocational courses was about twice the percentage of males. Across all school types, the percentage of males involved in vocational courses has grown faster (from 6.12% in 1977 to 11.64% in 1986) than the percentage of females (from 16.17% in 1977 to 19.14% in 1986).

VOCATIONALLY ORIENTED SUBJECTS IN SCHOOLS

In this section, we examine the extent of vocationalism within what we described in the last section as the general or academic sector of education in Irish second-level schools. This sector, as well as including more traditional academic subjects, also allows students to choose practical or vocationally-oriented subjects which are offered in all three public examinations. We examine trends in participation over a twelve to fourteen-year period in individual vocationally-oriented subjects on offer to students for public examinations in all kinds of schools. Our starting date for Group and Intermediate Certificate data is 1969, new subjects were examined for the first time on the Intermediate Certificate Examination in that year. Our starting date for the Leaving Certificate (1971) is later since several of the subjects we are interested in were not introduced until that year. Our analyses will suffer from the fact that detailed information is not available on the combination of subjects which students take for public examinations. We would need this information to determine the extent to which individual students take vocationally-oriented packages of subjects. The statistics we will consider on participation rates in different subjects can really only tell us the extent to which the system has a vocational emphasis, rather than the extent to which individuals have such an emphasis in their educational experience.

A number of points may be made about examinations in the system that may help to put the place of the individual student into perspective. Practically all students in the junior cycle of post-primary schools follow courses for either the Day-Group or Intermediate Certificate examinations.

and the great majority (over 90%) in recent years sit for one or other of these examinations (2, 20). Students preparing for the Day-Group Certificate examinations study Irish, English, Civics, and subjects from at least one of five groups of subjects categorized as Commerce (General), Commerce (Secretarial), Domestic Science, Manual Training (Woodwork, Metalwork, Mechanical Drawing, and Art), and Rural Science. Altogether 26 subjects are on offer, including German, Spanish, Italian, History, and Geography (39). The most commonly taken examination subjects are English, Mathematics, Irish, Geography, and History, the most popular of which (English) is taken by over 80% of students, the least popular (History) by over 50 percent.

For the Intermediate Certificate examination, the majority of candidates sit for examinations in seven or eight subjects (16). The most popular subjects are Mathematics, English, Irish, Geography, and History, all of which were taken by over 90% of candidates in 1983 (33). The next most popular subjects were Science (taken by 77% of students), French (taken by 69%) and Commerce (taken by 61%). Given this take-up of the major subjects, there obviously is not a great deal of room for vocationally-oriented subjects.

For the Leaving Certificate examinations, students sit for examinations in seven or, less commonly, eight or six subjects. In 1980, the most popular subjects were Mathematics, English, Irish, French, Biology, Geography, and History. Only the first four of these subjects were taken by more than 60% of candidates; the remaining three were taken by between 30 and 60% of candidates. This situation may be contrasted with that obtaining in 1961 when the six most popular subjects (Irish, English, Geography, Mathematics, History, and Latin) were all taken by over 60% of those who took the Leaving Certificate examination. Over the years, students' choice of subjects has become more varied (40).

The numbers of students who took vocationally-oriented subjects expressed as a percentage of the total number of students sitting for each of the public examinations (Group, Intermediate, and Leaving Certificate) are presented in Tables 4, 5, and 6. In the case of the Intermediate and Leaving Certificate examinations, information is provided for boys and girls separately. This was not possible in the case of the Group Certificate examination as a gender break-down in official statistics was available for only one year. The figure in the final column in each table is the increase in

numbers taking an examination over the period for which statistics are presented in the table expressed as a percentage of the number who took the examination in the first year cited in the table. The first row gives the percentage for all examination candidates. If figures for individual subjects exceed that percentage, this means that the increase in numbers taking that subject has been greater than for the examination generally. Similarly, if the figures for individual subjects are lower than the figures in the first row, this means that the increase (or decrease) in the numbers taking a subject is less than for the examination generally.

Over the period 1969 to 1983, the number of students sitting for the Group Certificate increased by 37.8 percent. Of the 15 vocational subjects listed in Table 4, nine showed an increase that was greater than this figure. The greatest increases occurred in Shorthand and Typewriting. Some of the other subjects which showed a considerable increase (Commerce and Bookkeeping) had attracted considerable numbers of students even in 1969.

TABLE 4
NUMBERS OF STUDENTS TAKING INDIVIDUAL SUBJECTS
AS A PERCENTAGE OF STUDENTS TAKING
THE GROUP CERTIFICATE EXAMINATION (GCE), 1969-1983

	1969	1973	1977	1983	Overall % Increase
Number taking GCE	14,481	18,245	18,136	19,961	37.8
Shorthand (General)	5.3	8.2	10.8	12.4	221.4
Typewriting (Secretarial)	6.2	8.1	11.9	12.6	182.5
Typewriting (General)	8.3	12.0	12.7	14.5	140.4
Shorthand (Secretarial)	6.3	7.4	11.4	10.7	135.0
Commerce	29.7	43.3	43.1	47.7	121.5
Bookkeeping	29.2	37.0	39.9	42.9	102.2
Needlework	8.7	11.1	13.3	12.3	95.0
Rural Science	20.8	25.1	26.1	24.8	64.0
Domestic Science	16.6	18.6	17.1	19.1	58.6
Mechanical Drawing	54.2	57.1	50.0	46.0	17.1
Metalwork	41.8	40.8	36.2	32.2	6.3
Woodwork	56.7	55.5	48.2	42.7	3.7
Commercial Arithmetic	18.8	12.5	12.2	14.1	3.3
Cookery	17.9	14.2	14.0	12.9	1.2
Laundry/Home Management	16.2	13.2	11.8	8.5	-28.7

(about 30%); the others, with the exception of Rural Science and Domestic Science, started from a low participation base. Three of the subjects, whose growth rate was less than that for the Group Certificate examination generally, were the most popular subjects in 1969 (Mechanical Drawing, Metalwork, Woodwork). Only two subjects were attracting less students in 1983 than in 1969 (Cookery and Laundry/ Home Management).

Although our data do not provide a gender breakdown, other sources indicate that there are marked gender differences in the take-up of subjects for the Group Certificate. For example, it has been estimated that boys devote about a third of their time in vocational schools to metalwork and woodwork, while girls devote the same amount of time to domestic economy (10).

In the case of the Intermediate Certificate examination, all the vocationally-oriented subjects, with one exception (Home Economics for girls), showed an increase in participation between 1969 and 1983 that was greater than the increase in numbers taking the Intermediate Certificate examination (Table 5). The largest increase for boys (with the exception of

TABLE 5
 NUMBERS OF STUDENTS TAKING INDIVIDUAL SUBJECTS
 AS A PERCENTAGE OF STUDENTS TAKING
 THE INTERMEDIATE CERTIFICATE EXAMINATION (ICE), 1969-1983.

		1969	1973	1977	1983	Overall % Increase
Number taking ICE	M	14,599	18,343	23,337	26,692	82.8
	F	16,368	20,828	25,003	28,379	73.4
Commerce	M	27.3	31.3	43.7	51.5	245.6
	F	58.2	58.0	63.9	69.3	106.3
Mech. Drawing	M	42.7	34.4	42.8	55.3	137.0
	F	0.6	0.0	0.2	1.1	203.7
Home Economics	M	0.0	0.1	0.3	0.9	[1,140.1] ¹
	F	74.6	73.1	71.8	66.9	55.4
Woodwork	M	24.5	30.1	38.5	40.0	199.4
	F	-	0.0	0.0	0.3	
Metalwork	M	18.7	20.3	24.3	26.1	155.0
	F	-	-	0.0	0.2	

¹ Parentheses indicate that the number involved in 1969 was less than 100

Home Economics, for which subject the numbers were very small) occurred in the case of Commerce (from 27.3% of boys taking the Intermediate Certificate examination to 51.5%) The largest increase for girls, though the numbers were also very small, occurred in the case of Mechanical Drawing (from 0.6% of girls taking the Intermediate Certificate examination to 1.1%)

Perhaps the most striking features of Table 5 are the marked differences in gender participation in all the vocationally-oriented subjects, with the possible exception of Commerce Home Economics is almost exclusively a female subject, while Mechanical Drawing, Woodwork, and Metalwork are almost exclusively male subjects

When we compare the increase in participation in individual vocational subjects with the overall increase in the numbers sitting for the Leaving Certificate examination between 1971 and 1983, we find that there were increases in all subjects (in either male or female participation) which exceeded the overall increase (Table 6) If we leave out of account subjects which had very low take-up rates (less than 100 students) in 1971, the subjects which registered the greatest increase in participation for boys were Building Construction (from 4.2% of boys taking the Leaving Certificate examination to 11.8%) and Engineering Workshop (from 4.6% to 11.4%) The subject which showed the greatest increase for girls was Business Organization (from 18.0% of girls taking the Leaving Certificate examination to 30.4%)

As in other examinations, gender differences in subject take-up in the Leaving Certificate examination were very marked Larger proportions of girls than of boys are attracted to vocationally-oriented subjects In 1983, almost 60% of girls studied Home Economics and 30% studied Business Organization, a subject which also attracted the largest number of boys (28%) However, practically no girls at all studied Technical Drawing, Agricultural Science, Building Construction, Agricultural Economics, or Engineering Workshop This reflects provision in schools, almost no girls' schools offer Metalwork, Woodwork, Technical Drawing, practically no girls at all studied Technical Drawing, Building Construction, or Engineering Workshop (21) Home Economics, on the other hand, was taken mostly by girls, though there is some evidence in the figures that the gap between girls and boys, though wide, is narrowing not just in Home Economics but in the take-up of vocationally-oriented subjects generally

TABLE 6

NUMBERS OF STUDENTS TAKING INDIVIDUAL SUBJECTS
AS A PERCENTAGE OF STUDENTS TAKING
THE LEAVING CERTIFICATE EXAMINATION (LCE), 1971¹-1983.

		1969	1973	1977	1983	Overall % Increase
Number taking LCE	M	9,558	11,831	16,427	19,719	106.3
	F	11,222	13,449	18,841	24,139	115.1
Business Organization	M	13.2	19.1	25.0	28.0	338.1
	F	18.0	23.0	26.9	30.4	262.4
Technical Drawing	M	10.0	8.6	16.3	23.4	382.7
	F	.0	.0	.0	.2	[2,850.0] ³
Home Economics ²	M	.2	.3	.9	7.8	[7,615.0]
	F	54.8	55.2	55.9	59.6	133.8
Building Construction (now Construction Studies)	M	4.2	5.5	8.1	11.8	482.0
	F	.0	-	-	.0	[500.0] ³
Agricultural Science	M	7.6	4.3	4.6	6.5	76.7
	F	.2	.1	.2	.5	[326.9] ³
Accounting	M	21.8	17.6	19.1	22.6	113.7
	F	23.5	21.0	21.3	23.8	117.9
Agricultural Economics	M	.1	.9	.8	1.1	[1,428.6] ³
	F	-	-	.0	.1	-
Engineering Workshop	M	4.6	5.1	8.7	11.4	417.9
	F	-	-	-	.0	-

¹ 1971 is used as the starting year because new subjects were introduced to the LCE in that year.

² Figures are for Social and Scientific and General combined.

³ Parentheses indicate that the number involved in 1971 was less than 100.

As well as being related to gender, there is evidence that the take-up of vocational subjects in public examinations also varies with the social-class origins and achievement levels of students. Breen (4) found that in the 1981

Leaving Certificate examination, vocationally-oriented subjects (Technical Drawing and probably also Engineering Workshop and Building Construction) were almost exclusively taken by boys from homes of low socioeconomic status. Similarly, Home Economics and Commerce subjects were most likely to be taken by girls from low socio-economic-status homes. It was possible to attribute these class-related differences in subject take-up to subject availability in the schools attended by students and to the students' prior achievement (especially their performance in the relevant areas of the Intermediate Certificate examination).

It is clear that in all three public examinations there is still a heavy emphasis on a relatively small number of subjects, none of which is vocational or practical. Further, according to Breen (3), the majority of students who do take vocational subjects, take only one or two. Again, the degree of vocationalism of the subjects that are on offer should not be over-estimated. An examination of the aims of individual subjects (where these are provided) indicates that individual courses are not designed to be specifically vocational. For example, in the case of Woodwork at the Intermediate Certificate level, the aim of the course is described as

primarily an educational one and the teachers' efforts should be directed not merely to the training of the pupil in the use of tools and materials, but also to the development in him of self-reliance, resourcefulness, initiative and accuracy (32, p 145)

In a similar vein, Mechanical Drawing (also at Intermediate Certificate level) is described as 'the language of industry' and as such affords 'a concise means of communication, being clear and exact, and having a universal application and interpretation' (32, p 151)

At the Leaving Certificate level, the recently stated aims for vocationally-oriented subjects are not very different. For example, the Technical Drawing course is described as

an educational experience in the broadest sense as it provides the students with a body of knowledge and develops their intellect and creative abilities in topics which are appropriate and meaningful in a technological world (36, p 285)

Another subject, Construction Studies (formerly Building Construction), aims to introduce pupils to the knowledge and skills involved in construction technology and construction materials and practices as well as developing pupils' ability to communicate ideas and information and contributing towards their general education (36).

PROGRAMMES IN PREPARATION FOR EMPLOYMENT

The most obvious expression of vocationalism in Irish schools is to be found in programmes which are designed to prepare students for employment. Originally, such courses were a feature of vocational, but not of secondary schools. However, the numbers involved in such courses were relatively small and the great majority of students in schools up to the second half of the 1970s were not exposed to programmes designed to allow students acquire skills directly relevant to work and employment. Perhaps it was this kind of situation which prompted a majority (53%) of respondents in a national survey of public opinion on Irish education which was carried out in 1974 to say that schools placed too little emphasis on preparing students for the world of work (42).

Since the 1970s, there have been four major programmes in operation in Irish schools which, to a greater or less extent, have attempted to prepare students for employment. These are Pre-Employment courses (PEC) which ran from 1977 to 1983; Vocational Preparation and Training (VPT) Programmes which commenced in 1984 and superseded Pre-Employment courses; Transition Year Programmes, which were piloted in the 1970s and are now more generally available to schools; and Pilot Projects on the Transition from Education to Adult and Working Life, which ran between 1979 and 1987. It is not without interest that all of these, with the exception of the Transition Year Programme, have been introduced with the financial support of the European Community. Apart from these major initiatives, there have been other smaller-scale ones which have been undertaken by individual teachers, schools, and vocational-education committees (see 8, 41), but these will not be considered here. In passing, we may note that other vocational- education programmes have been established outside schools since the 1970s and are now in competition with school-based programmes.

Pre-Employment Courses

Pre-Employment courses were introduced in 1977 for students who would ordinarily have been expected to leave school on reaching the school-leaving age but returned to school because of their failure to find employment. The courses were confined to vocational and community/comprehensive schools. Their general aim was to ease the transition of young people from school to work by bridging the gap between the values and experiences which are normally part of traditional education and those which obtain in the adult world of work.

The courses had three main sections: (i) General Studies, which included personal and social development, were made up of Communications, Social Mathematics, and Industrial/Social Studies, and were designed to develop students' ability to make career decisions and match their capabilities and interests to available opportunities, (ii) Work Experience, in which students obtained first-hand experience of work in a number of different jobs one day a week, (iii) Technical Modules, in which the emphasis was on the development of practical skills, personal initiative, and high standards of workmanship. Originally, there were nine Technical-Modules (later increased to 15) and it was recommended that schools choose two, as well as developing their own. The most popular Technical Modules were Basic Construction, Industry Skills, and Light Engineering (8, 45).

In 1977-78, 80 schools offered Pre-Employment courses, and over 1,800 students were involved. In the following year, the number of schools rose to 123 and the number of students to 2,600 (45). The figures for the 1980s show a continuing rise in enrolment (34) (Table 7). Between 1981/82 and 1983/84,

TABLE 7

NUMBERS OF STUDENTS WHO TRANSFERRED TO PRE EMPLOYMENT COURSES, BY GENDER, 1981/82 1983/84

Year	M	F	T
1981/82	2,067	801	2,868
1982/83	2,344	951	3,295
1983/84	2,692	1,418	4,110

enrolment rose from 2,868 to 4,110, an increase of 43.3% over the three years. The number of boys exceeded the number of girls in each year. In the first two years, there were over seven boys for every three girls. In the final year, the gap had closed somewhat and the ratio was 65 to 35. It should be pointed out, however, that during the same period approximately 7,000 girls enrolled in a secretarial course each year (34). If these are added to the figures in Table 6, then the relative participation rates of boys and girls in vocationally-oriented courses are completely reversed. The percentage of students who were girls in such courses varied over the three years between 75 and 79.

Vocational Preparation and Training (VPT) Programmes

By contrast with the Pre-Employment Courses, Vocational Preparation and Training (VPT) programmes were provided in secondary as well as in vocational and comprehensive/community schools. The new VPT courses resembled the older Pre-Employment Courses in many respects. Introduced as a one-year whole-time programme in 1984, VPT was targeted at students 'who having completed their compulsory education, desire to prepare and equip themselves for employment' (35, p.5). Its general objective was that of 'bridging the gap between the values and experiences normally part of traditional education and those current in the adult world of work' (35, p.5).

VPT programme content consists of three sections: Vocational Studies, Work Experience and Preparation for Working Life, and General Studies. About 40% of time is allocated to Vocational Studies which include practical work in one of the following eight vocational areas: Engineering, Construction, Agriculture, Services, Craft and Design, Commerce, Science, and Electrics/ Electronics. Schools were encouraged to develop other areas in response to local needs. It is recommended that, where possible, Work Experience should be related to the vocational sector chosen. In some cases, work simulation might be accepted as a substitute for actual work experience. The General Studies section is composed of Education for Living and Physical Education, Communications, and Social Mathematics. About 35% of time is allocated to this sector and the remainder (25%) to Work Experience and Preparation for Working Life.

In the first year of the operation of VPT (1984-85), the most frequently offered vocational areas were Commerce (offered by 73% of schools),

Construction, and Engineering (both offered by 34% of schools) Only 7% of schools offered Electrics/Electronics and 6% the Science option

Almost 16,000 students participated in the programme (11,000 girls and 5,000 boys) in 1984-85, which is a considerable increase over the numbers participating in the earlier Pre-Employment courses. Participants were attending 223 vocational schools, 118 secondary schools, and 39 comprehensive or community schools. The large number of girls reflects the number who traditionally took secretarial courses in schools. The participants can be divided into two categories in terms of age and achievement: those with a median age of approximately 16 years, whose highest qualification was the Intermediate or Group Certificate (5% had no formal qualification) and those aged 18 years or more who had a Leaving Certificate. Fifty-four percent of participants were in the former group and 46% in the latter group.

Among 16-year olds, both Commerce and Construction were taken by 27% of participants and Engineering by 26 percent. Among 18-year olds, the percentage taking Commerce was 86, other vocational areas were taken by 4% or fewer students.

There were marked gender differences in provision and take-up. Girls' schools offered only three of the eight options of vocational studies: Commerce, Craft and Design, and Services. Boys' schools offered all options except Commerce. In the selection of options, all areas, except Craft and Design, showed considerable differences in take-up between males and females (38).

Transition Year Programmes

Transition Year Programmes which were piloted in 20 second-level schools from 1974 onwards are one-year interdisciplinary programmes for students who have completed an approved course for recognized junior students. Programmes, according to official regulations, should be designed to meet the needs of those for whom the transition year would represent the end of formal full-time schooling as well as those who intended to follow approved courses for recognized senior students (32). In an evaluation at the pilot phase, very strong support was found among students and parents for the programme. Over 80% of parents indicated that they would want

other children of theirs to do a transition year if the occasion arose. Figures for student support were similar (13).

Schools have a good deal of discretion in determining the content of transition programmes and obviously content might vary according to the needs of students, in particular whether they are leaving school at the end of the programme or, as is more common, proceeding to senior cycle or another type of education or training. The Curriculum and Examinations Board (9) listed a number of components of a Transition Year Programme which include academic, technical, and aesthetic studies, social and personal development, careers education, and work experience.

Although work experience is regarded as an integral part of all Transition Year Programmes and although programmes may be designed for students about to leave school, nevertheless it is not intended that programmes should have a narrow vocational focus or job-placement thrust (9). At the same time, a student will be expected to have acquired by the end of a programme, in addition to basic skills of literacy, numeracy, and oracy, 'a range of transferable thinking skills, study skills and other vocational skills' (9, p.8). One school, which has been operating a Transition Programme since 1975, provided for the vocational development of students by having lectures on 'the world of work' and week-long job placements for each student in each of the three school terms. Incidentally, job placement was the aspect of the programme which most students said they had enjoyed (22).

EC Transition Programmes

There were two rounds of EC sponsored Transition Programmes. The first round lasted from 1979 to 1982 (see 8, 51); the second round commenced in 1983 and concluded in 1987. The focus of programmes developed as part of these projects is by definition broader than the concept of vocational education. A change in title of the later series to 'Transition from Education to Adult and Working Life' from that of the earlier series which did not include adult life is perhaps indicative of a broader view of education which questions the position that educational programmes are to be valued only in terms of their currency on the labour market. It may also reflect a less optimistic outlook for the employment prospects of young people. Our concern here will be restricted to one of the second-round projects, the Senior Certificate programme developed at Shannon Curriculum Development Centre. This programme is chosen for consideration because

it was the most comprehensive, being offered as a complete alternative to the Leaving Certificate course and, like VPT programmes, is directed towards young people who are likely to experience difficulty in finding employment. As well as being offered as a totally alternative senior-cycle curriculum in itself, individual courses may be used within the context of other programmes (Leaving Certificate, Transition Year Programmes, or Vocational Preparation and Training Programmes)

The seven subjects for which syllabi have been prepared are Work and Communication Skills, Food and Agriculture, Social and Cultural Studies, General Technology, Computer Applications, Conversational Irish, and Mathematics (53). General concerns which characterize the design of the programme include education for life, learning how to learn, improving student motivation using a task-centred approach, personal development, the use of out-of-school locations and resources to enrich the learning environment, the integration of traditionally discrete subject areas, preparation for fruitful use of free time, and preparation for citizenship and the practical demands of living. Judging from these concerns and curricular designations, considerable emphasis would appear to be placed on general educational development. Though the over-all thrust of the curriculum might be regarded in the Irish context as 'non-traditional' in terms of teaching and learning methods and in a clear commitment to out-of-school learning experiences, vocational skills directed towards particular occupations are not taught. Some opportunity for acquiring such skills may be provided during work experience. However, not a great deal of time (about a month over each of the two years) was devoted to actual work experience.

In 1986-87, 57 schools of all types, mostly in the Munster area, offered Shannon Senior Certificate programmes. The numbers of students in a school who took the course varied between 12 and 62. In all schools, the vast majority of students had either a Group or an Intermediate Certificate. However, compared to other students in the school, students following Senior Certificate programmes were regarded by principals in most schools as academically 'weak' (11).

Senior Certificate programmes were perceived by school principals as providing a good general foundation for working life for students, especially in enhancing their personal development (e.g., in 'improving feelings of self-worth'). They were preferred to VPT programmes which were

perceived to be too vocational, too oriented to jobs, and as placing too great an emphasis on practical subjects (11). It should also be noted that, in general, the Senior Certificate course is more structured than VPT programmes and that Senior Certificate students are more formally assessed than VPT students.

CONCLUSION

The data presented in this paper indicate that there is a sense in which it can be said that there has been an increase in vocationalism in Irish education. The increase can be seen in the growth in numbers attending vocational school at the senior-cycle level, though not at the junior-cycle level, between 1967 and 1982. It can also be seen, again at senior cycle, in the growth in the proportion of students who are enrolled in vocational courses, compared to the proportion enrolled in general education courses. This growth was most pronounced in secondary schools since 1982. A final source of evidence of vocationalism is to be found in the increase in the numbers of students sitting for vocational subjects in the Group, Intermediate, and Leaving Certificate examinations through the 1970s and early 1980s. Despite these trends, the nature of the vocational offerings and the numbers of students who select those offerings suggest that the extent of vocationalism in the system generally is not great.

Gender bias in the selection of vocational subjects was very obvious in the data which we examined. Not only does it occur in the traditional public examinations, it also occurs in the newer vocationally-oriented programmes which are being offered as an alternative to more traditional courses. It is obvious that it is difficult for schools to develop their resources to a point where they can offer a range of subjects which they have not traditionally offered. Individual students may also be slow to depart from established patterns of educational and vocational choice.

The types of vocational education being offered in schools would seem for the most part to be the most general, designed to make students adaptable in the work environment rather than providing them with any occupationally specific skills or even skills for a group of occupations which utilize a range of similar skills, except in the case of secretarial courses. That certainly seems to be true of most of the subjects on offer in public examinations as well as in Transition Year Programmes. It is less true of the newer programmes on

offer in the senior cycle (particularly VPT) which devote a greater amount of time to vocationally-oriented activities (including work experience) and offer programmes which may be regarded as providing general preparation and orientation for occupations of a particular type

Given a situation in which changes are continually occurring in the nature and structure of employment and in which it may not be possible for all workers to expect continuous paid employment, schools have been wise to adopt a rather liberal view of vocational education. Indeed, they and educational administrators might be advised to place even greater emphasis on enhancing the quality of general education, ensuring that all students are provided with general skills in the areas of literacy, numeracy, and science (see 14,52). Such an approach would not be incompatible with the perceived needs of employers who 'value general competencies in the areas of literacy, numeracy and manipulative skills as much as they do skills related to specific types of jobs' (35, p 4). In practice, it would seem that general literacy skills are more likely than any other factor to yield success in the labour market (55). Further, given the importance attached to the need for workers to be adaptable in a fast-changing and unpredictable economy, there is a strong argument in favour of focusing in vocational education on skills which will be transferable from one job to another (12).

That the knowledge and skills that are important in traditional education also seem to be important for students who are likely to leave the system at a relatively early stage does not mean that no adaptation of programmes will be required for such students. As more students stay for longer periods in the formal educational system, schools become conscious of a need to provide programmes that will interest and motivate young people who would previously have left school at the end of junior cycle. Practical rather than vocational education, together with new approaches to teaching and learning, may be regarded as being more relevant for students who are not interested in a traditional classical liberal- arts programme and, indeed, if required to follow such a programme, would probably leave school (see 17).

Keeping such students at school may be important for a number of political reasons. Out of school, they would just add to the already high numbers of youth who are unemployed. Keeping them at school, on the other hand, may seem a logical and effective way of integrating young people who are at the bottom of the occupational and socio-economic ladders into the

mainstream (see 17). This view seems to suggest that the function of secondary schooling is not to produce differentiated workers that will fit into a differentiated economy but rather to produce a more standardized citizenry in line with the egalitarian demands of nation-building and citizenship privileges (1).

If youth unemployment decreases, then it is likely that European countries will follow the trend which has been apparent in north America for some time in which vocational education is decreasingly seen as a function of second-level schools and increasingly as a function of post-secondary school institutions (23). It will, of course, remain the task of second-level schools to prepare students for whatever further education they may require, whether that education be provided in formal educational institutions or in industry. In the meanwhile, given our present state of knowledge, it would appear that the criteria to be used in determining the second-level educational programmes of schools should be primarily in terms of students' educational and total personal development rather than in terms of an externally defined process to fit students to the tasks of any particular job.

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