

Trends in Higher Education Participation in Northern Ireland

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Abstract: This paper is concerned with the analysis of a recent cohort of higher education entrants from Northern Ireland. It examines the social and educational characteristics of these entrants in the light of data relating to previous entry cohorts and considers a number of policy issues arising from the analysis.

I INTRODUCTION

There is no doubt that the nature of the current debates about higher education in the UK are only incidentally concerned with the characteristics of participation. Since the early 1980s issues of finance, research selectivity and the nature of the relationships between government and the institutions of higher education have been the dominant concerns. The characteristics of the participants and consumers of higher education have only been of interest in relation to the attempts to project the numbers in higher education up to the end of the century. In this regard considerable debate followed the publication by the Department of Education and Science (DES, 1984) of projections which made particular assumptions about likely numbers of mature entrants and the participation rates of females. Both, it was argued

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were too low. The debate involved the Royal Society amongst others and the DES eventually published revised projections with new and higher assumptions about numbers of women and mature students (DES, 1986). Even though many regard the provision of places in the UK as no longer directly related to the demand for places, the understanding of the social components of that demand remains important. As Williams and Blackstone (1983, p. 17) have recently pointed out:

There has been no comprehensive study of the participation of different social groups to examine the effects of the post-Robbins expansion. Little information is available on the kinds of students who attend different institutions and categories of institutions or who study different subjects . . . we ought to be able to tell how much worse the situation would be if we had less higher education, or would become if . . . certain types of institution or course were closed.

Recently Rudd (1987) has examined class aspects of higher education participation and some aspects of male and female achievement in higher education. In Ireland this dearth of information is not so severe. Clancy (1982) has provided a major assessment of the social characteristics of those entering higher education in the Republic of Ireland and the present research team have monitored aspects of participation of entrants to higher education in Northern Ireland (Osborne *et al.*, 1984; Cormack *et al.*, 1986). This paper seeks to chart some of the changes in participation in the past decade or so and to consider the implications of the evidence in the light of both higher education policies and the developing and highly sensitive area of equal opportunity policies.

THE DATA

The data used in this paper, the "Northern Irish Higher Education Dataset", was collected by two ESRC-supported research projects undertaken to monitor the characteristics of Northern Ireland higher education entrants and to examine the early labour market experiences of Northern Irish graduates. The first, carried out in 1980, surveyed by postal questionnaire *all* entrants who received a higher education grant from a Northern Irish Education and Library Board in 1973 and 1979. At the time of these surveys only tiny numbers of new entrants were not grant aided. Both cohorts were asked about a variety of topics, most notably their secondary education (school attended, A-level subject choice, etc.) and their higher education (institution, subject choice, etc.). Both cohorts also responded to a variety of attitude-type questions directed at policy issues. In addition, the 1973 cohort, who by 1980

had left their undergraduate degree courses, were questioned about their "present" (1980) activities (location, work and/or postgraduate education, etc.). (See Cormack *et al.*, 1983b.)

The second project can be considered a replication and extension of the first. This second study, carried out in 1985/86, re-surveyed the 1979 cohort (who had by then left their undergraduate courses) and also surveyed all those who had received a higher education grant from a Northern Irish board for the first time in 1985. The questions and codings in 1985/86 were designed to replicate the information collected in 1980 and also, building upon the experience of the first study, incorporated a number of improvements and extensions. The most significant of these for the purposes of this paper were:

- (1) Improvements in coding, particularly the use of both "old" and "new" versions of UCCA higher education subject codes (to allow both comparison with the earlier study and cross-reference to other sources of contemporary data; the "old" UCCA codings are used in this paper), the coding of jobs by the highly-detailed CODOT coding system and the development of a schema for recoding the occupational data into a "sociological" categorisation of occupation – the 36 category "Hope-Goldthorpe schema" (the census social class coding applied in this paper was used across both studies).
- (2) The replication of the 1980 study in 1985/86 – in particular the re-interviewing of the 1979 cohort of entrants some six years later after they had completed their first degree courses – allows for rigorous trend analyses over a twelve-year span in which rates and patterns of participation in higher education in Northern Ireland have altered significantly (see Cormack *et al.*, 1988).

One should note that the Education and Library boards, as well as providing names and addresses, also made available important information which they held in their grant files. Therefore, the data come from two studies, one of which is a replication of the other. Complete cohorts (not samples) were surveyed and the "middle" (1979) cohort was interviewed at two stages, at entrance to higher education and some six years later after they had left their first degree courses. The response rates for the surveys are shown in Table 1.

The results given below are based on analyses of the respondents to the 1980 survey of the two "earlier" (1973 and 1979) cohorts and to the 1985/86 survey of the "later" (1985) cohort. From the basic information provided by the grant authorities for the whole cohorts it was possible to examine the characteristics of non-respondents. The main bias of any significance appears to be an underrepresentation of respondents from a lower manual background.

Table 1: *Higher Education Entrants' Surveys*

<i>Entry Year</i>	<i>Total N</i>	<i>Response Rate 1980</i>	<i>Response Rate 1985/86</i>
1973	2,477	51.4	—
1979	3,598	73.9	54.7
1985	4,640	—	82.3

Approximately 8 per cent of the 1979 cohort who did *not* respond in 1980 *did* respond in 1985/86; by cross-referencing between the two surveys and the background information on the whole cohort held by the grant authorities it is possible to attain an effective response rate for some variables that is *higher* than the response rate for either 1980 or 1985/86. In sum, this means that the total amount of potential information on the cohorts, particularly the 1979 cohort, is more extensive than that reported here. A more statistically sophisticated trend analysis incorporating weighting for non-response is currently underway. The preliminary analysis reported here is descriptive and is motivated by a desire to produce results quickly of relevance to policy concerns.¹

II PARTICIPATION

Class, Gender and Religion

In the 1960s in the UK, educational and social research began to point to the extent to which a selective secondary education system and an elite provision of higher education restricted working class and women's opportunities. Official reports such as the Robbins Report (1963) demonstrated the extent to which this represented a "wastage of ability" and argued for the expansion of university education for both social and educational as well as economic reasons. The Lockwood Report (1965) for Northern Ireland echoed this line and recommended a second university for Northern Ireland. Much more recently, the advent of specific legislation seeking to outlaw discrimination and to promote equality of opportunity on the grounds of gender and religion have focused attention on these aspects of participation while class has become of much less concern in terms of active public policy, despite it being a key variable in social research and a crucial element of projections of higher education demand.

1. A further project being undertaken by three of the authors for the Department of Education in Northern Ireland involving a major survey of potential higher education entrants from Northern Ireland is producing results broadly the same as those for 1985. A report of this project will be published.

The data in Table 2 allow us to identify some of the basic trends in participation. Taking social class first, those from manual backgrounds represented a quarter of entrants in 1973 and this had risen to just under a third by 1979. This position has slipped a little among the 1985 entrants with the representation of those from social classes IV and V down a little. Comparison with other parts of the UK cannot be readily undertaken because although figures for university entrants are available, there are none which include polytechnic entrants to a degree and equivalent courses. However, if we take Northern Ireland entrants to UK universities in 1985, then 31.9 per cent came from manual backgrounds and this compares with 19.9 per cent for all UK entrants to universities in 1984 (Rudd, 1987). Part of this difference may be accounted for by social structure differences between Northern Ireland and Britain (that is, the larger part of the population that is in manual employment) but the main reason stems from characteristics associated with the nature of higher education participation in Northern Ireland as will be discussed below. This relatively higher representation of students from manual backgrounds is also evident when compared with the profile of entrants to higher education in the Republic of Ireland. The higher availability of student grants in Northern Ireland has been identified as one important factor accounting for this difference (Osborne and Cormack, 1985).

Table 2: *Higher Education Entrants, Gender, Class* and Religion***

	1973	1979	1985
Males	58.9	54.4	50.9
Females	41.1	45.6	49.1
Non-manual	75.5	68.3	69.4
Manual	24.5	31.7	30.6
Protestants	68.9	60.7	56.2
Catholics	31.1	39.3	43.8
N	1,273	2,658	3,826

*The Registrar-General's system of social class has been collapsed into manual/non-manual for convenience and because numbers in social classes IV and V especially are too small to justify separation in the analysis.

**Percentages in tables may not total exactly 100 due to rounding.

Turning to gender, it is clearly evident that there has been a steady increase in the proportion of women entrants. In 1973, approximately four out of ten new entrants were female and since then there has been a steady rise so that by 1985 almost half of new entrants were female. This rise in female

representation can be attributed to a number of factors. One ironically is the decline in teacher training places which were disproportionately female. Many more women began to enter "mainstream" higher education and this coincided with the creation of new undergraduate programmes in para-medical occupations in the then Ulster Polytechnic which were popular with women. Rising female participation has also gone hand-in-hand with rising school achievements of women who, in terms of the proportions leaving school with "A" levels, "O" levels, etc., now leave school better qualified than men (Osborne and Cormack, 1988). Undoubtedly, however, rising educational and employment aspirations and expectations of women themselves underpin this increase.

Our third social characteristic of participation is religion. The monitoring of educational and employment opportunities in terms of religion is now becoming a major feature in Northern Ireland (Cormack and Osborne, 1983; Osborne and Cormack, 1986, 1987). The participation rates of Catholics in higher education rose steadily during the 1950s and 1960s with the most important factors accounting for this being identified as the provision of free secondary education under the Northern Ireland Education Act of 1947 and the introduction of student maintenance grants in 1965. From the data in Table 2 it is clear that the participation of Catholics continued to rise through the 1970s and into the 1980s so that they represented almost 44 per cent of entrants in 1985. Because of difficulties associated with the 1981 population census (under-enumeration and non-response to the voluntary question seeking religious affiliation) it is not possible to construct accurate age-specific cohorts for the two religious groups and, therefore, age participation rates. Nevertheless, it is clear from the data that Catholic participation has continued to rise during this period and their representation is fairly close to their representation amongst those leaving school with the minimum qualifications necessary to enter higher education. There is, however, a marked difference in the social class profiles of Protestant and Catholic entrants. In 1985 for example, three-quarters of Protestants (74.8%) came from a non-manual background, compared with half of Catholic entrants (52%). Catholics actually represent the majority of those coming from manual backgrounds. It has been pointed out elsewhere that, in general, the employment opportunities of Protestants from manual backgrounds are better than those of Catholics from the same backgrounds, and that Catholics therefore may stay on beyond the compulsory school leaving age and subsequently enter higher education to a greater extent than Protestants from the same class background. Higher education offers a major route for potential social mobility for Catholics (Miller *et al.*, 1988a; Osborne and Cormack, 1988).

Our final characteristic of participation relates to the location of study of

entrants. Up to the end of the 1960s approximately 80 per cent of Northern Ireland students studied in the Province with 10-12 per cent studying in the Republic of Ireland (almost entirely in Trinity College, Dublin) and only small numbers in Britain. At the end of the 1960s with the introduction of mandatory grants and the extension of the UCCA scheme to Northern Ireland, this pattern began to change. There was a substantial increase in participation, with increasing proportions of entrants entering institutions in Britain and with a decline in those going to the Irish Republic. The onset of the civil disturbances amplified these patterns with the proportion of new entrants leaving Northern Ireland peaking in 1973/74 at 40 per cent. Since then, the figures have stabilised at around one-third of new entrants leaving to study outside Northern Ireland with the proportion entering institutions in the Republic of Ireland falling. (The data for 1986/87 entrants suggest, however, that this pattern may be altering with the proportion entering institutions in Britain again on the increase. Although the proportion entering institutions in the Irish Republic is at a historical low, the total proportion of the cohort leaving Northern Ireland has increased to 38.0 per cent.) At the same time as the outflow of students began to increase in the late 1960s and 1970s the reverse flow of students coming to Northern Ireland began to drop. This upset one of the planning assumptions of Lockwood and created problems for the institutions in Northern Ireland throughout the 1970s, particularly the New University of Ulster which culminated in the review of higher education by the Chilver Committee (1982) and the radical institutional rearrangements set in motion in 1982 which brought about the merging of the New University of Ulster with the Ulster Polytechnic to form the University of Ulster (DENI, 1982). In the most recent years there has been a major increase in applications and, to a lesser extent, entrants, from the Republic of Ireland to the two Northern Ireland institutions.²

III ENTRY QUALIFICATIONS AND PARTICIPATION

The next stage of our analysis is to assess entry qualifications. In 1973 and 1979 approximately 95 per cent of entrants had "A" levels and despite the increasing emphasis in policy discussions being given to extending participation by non-traditional entrants, 94 per cent of 1985 entrants possessed "A"

2. Since 1985 the numbers of applicants from the Republic of Ireland to the two universities in Northern Ireland has increased to several thousand. The number of entrants, however, has been much lower. In 1987/88 for example, there were 344 new full-time undergraduate entrants from the Republic of Ireland to the University of Ulster and 86 to Queen's University. The growth in these numbers and the possible "displacement" of Northern Ireland students is known to be of concern to policy makers, particularly in the light of rising proportions of new entrants leaving Northern Ireland to study.

levels. In terms of the number of "A" levels there have been increases in those entering with 1-2 and 3 "A" levels and a drop in those with 4 passes who represented 11.8 per cent of "A" level entrants in 1985 compared with 19.9 per cent in 1973 (in absolute terms the numbers have remained stable as the total cohort has increased). In 1985 a clear majority, however, enter with 3 or more "A" levels (78.4%). The continued expansion of the entry cohort has drawn in increasing numbers of more modest "A" level achievers as is shown in Table 3. In both 1973 and 1979 those entering with 9 points or more constituted three-quarters of new entrants whereas in 1985 it was just over half (54.7%). Almost one in ten entered in 1985 with "A" level scores between 1 and 4 points.

Table 3: *Northern Ireland Higher Education Entrants by "A" Level Scores* (%)*

	1-4	5-8	9-14	15-20
1973	1.4	17.2	60.5	20.8
1979	2.1	22.0	61.1	14.8
1985	8.4	36.8	43.4	11.3

*Scores calculated on the basis of the following "A" level grades:

A = 5, B = 4, C = 3, D = 2 and E = 1.

The final general characteristic to be considered of entry characteristics is the subject of "A" levels. While it is not automatic that subjects studied at "A" level translate into the subjects studied in higher education, most students embark on courses which reflect their "A" level combinations. It is particularly difficult to enter a science or technology based course without "A" levels dominated by science subjects. In the past few years there has been a sustained campaign by government to try to increase the representation of sciences in schools and, in particular to increase the proportion of women taking science based courses. These attempts seem to have begun to pay off. Between 1973 and 1979 there was a marked swing towards the Arts with 57 per cent of entrants having all Arts combinations and those with Science related combinations declining from 45.7 per cent to 39 per cent by 1979. The pattern by 1985 has shown a substantial alteration. Science "A" level combinations now account for a slight majority of entrants (51.8%). We shall see below how this change is distributed across social groups.³

3. The subjects of "A" levels were classified on the basis of their combinations. "Science 'A' levels" are those combinations of all Science subjects or where Science subjects are dominant. "Arts 'A' levels" refer to combinations where Arts subjects are dominant. Other combinations were allocated to a residual "Other" category.

The preceding data have provided an outline sketch of the basic characteristics of participation and its changes over the three entry cohorts. The second part of the paper is concerned with a more detailed consideration of the characteristics of the identified groups in terms of "A" levels, location of study and courses taken. Such a detailed analysis is essential both to consider the possible social implications of developing higher education policies and also the implications these patterns have for policies designed to further equality of opportunity.

Class

The consideration of social class will, for the sake of both simplicity and comparison be done on the basis of non-manual/manual. In Table 4 can be seen the number of "A" levels of entrants disaggregated in terms of the class categories. It is apparent that although there have been some fluctuations, entrants from non-manual backgrounds are more likely to enter with 3 or 4 "A" levels. This difference is reflected in "A" level scores with 58.7 per cent of non-manual entrants having a score of 9 points or more compared with 48.5 per cent of manual entrants in 1985.

The mean score for non-manual entrants in 1985 was 9.9 while that for manual entrants was 8.9 ($F < .001$) maintaining the difference evident in the 1979 cohort. These class differences in attainment noted for the earlier cohort reinforce the findings of Rudd (1987) for university entrants in the UK. It is clear that the continuing expansion of participation in Northern Ireland is being achieved through the bringing in of more modest "A" level achievers reflected in the "A" level scores of both non-manual and manual entrants but that this is particularly the case for manual entrants. There are substantial differences in "A" level subject profiles of 1985 entrants with those from non-manual backgrounds far more likely to have science combinations (56%) compared with 46.8 per cent of manual entrants. The courses studied in higher education, however, show comparatively small differences with the main difference being the higher representation of students from non-manual backgrounds on health courses. Furthermore, differences between those from different social class backgrounds can at least partly be ascribed to religious differences in secondary schooling, and, with regard to subject choice, are eclipsed by differences in gender (Miller *et al.*, 1986b).

Gender

The increasing representation of women amongst higher education entrants has been noted above. The expansion of the 1970s has continued into the 1980s. Perhaps most importantly it is now clear that females leave school better qualified than males, in terms of the level of attainment of those leaving

with "A" levels and, with fewer females leaving school with no qualifications (Osborne and Cormack, 1988). It is also clear that the traditional pattern of proportionately fewer qualified females than males proceeding into higher education is declining. The proportion of women entering higher education with 3 or more "A" levels in 1985 is virtually the same as for men although a higher proportion of men have 4 "A" levels (Table 4). In 1985, 54.6 per cent of males entered with 9 points or more while 54.9 per cent of females did so.

Table 4: *Number of "A" Levels and Mean "A" Level Scores for Entry Cohorts*

		Number of "A" Levels			Mean
		1-2	3	4	
Non-manual	1973	17.0	61.7	21.3	10.0
	1979	20.7	62.8	16.5	9.4
	1985	17.6	69.3	13.1	9.9
Manual	1973	22.8	59.3	17.9	9.2
	1979	30.7	57.2	12.1	8.1
	1985	27.6	63.6	8.8	8.9
Men	1973	19.6	57.5	22.9	9.5
	1979	23.2	57.6	19.2	9.2
	1985	21.9	64.2	13.9	9.5
Women	1973	17.4	64.6	18.0	10.1
	1979	25.0	56.2	9.8	8.8
	1985	21.4	69.0	9.6	9.4
Protestant	1973	18.0	58.8	23.2	9.9
	1979	21.7	61.4	16.9	9.4
	1985	18.0	67.9	14.1	9.9
Catholic	1973	19.7	64.1	16.2	9.5
	1979	28.2	61.1	10.7	8.3
	1985	25.4	66.0	8.6	9.0

In terms of average "A" level scores (Table 4), the male advantage in 1979 had been virtually eliminated by 1985 (male average score, 9.5, female average score, 9.4). Table 5 shows the mean "A" level scores for gender broken down by class for the three entry cohorts. The variations by both class and gender shown in both 1973 and 1979 are only evident for class in the 1985 data with female and male scores the same for non-manual entrants and, at a lower level, also for manual entrants. Turning to "A" level subjects, the traditional gender pattern of lower female proportions with Science "A" levels continues to be represented in the 1985 data. Almost two-thirds of males have Science "A" levels (61.3%) compared with 42.1 per cent of females. Twice as many, proportionately, females as males have Arts "A" level combinations. Within the

Science category it has been demonstrated that Biology is far more significant in the female profile than in that of males (Osborne and Cormack, 1988).

Table 5: *Mean "A" Level Scores for Gender and Class*

		Male	Female
1973	Non-Manual	9.8	10.3
	Manual	9.1	9.5
1979	Non-Manual	9.6	9.2
	Manual	8.3	7.8
1985	Non-Manual	9.9	9.8
	Manual	8.8	8.8

Religion

As has been noted above, the participation of Catholics in higher education has continued to increase. Catholic entrants continue, however, to have fewer "A" levels. In 1973, 19.7 per cent of Catholic entrants had up to 2 "A" levels whereas this had increased to 25.7 per cent in 1985. Protestants were significantly more likely to enter with 4 "A" levels and the proportion with up to 2 "A" levels remained at 18 per cent in 1985. This difference carries over into "A" level scores with 59.1 per cent of Protestants entering with 9 points or more compared with 49.8 per cent of Catholics. Catholics actually form a majority of those entering with only 1-4 points. It is apparent from Table 2 that Protestants enter higher education with "A" level mean scores significantly higher than Catholics (9.9 to 9.0, $F < .001$) in 1985 and this margin has remained fairly steady over time. Continuing this analysis the mean scores are shown in Table 6 for the two religious groups disaggregated by class and gender.

Table 6: *Mean "A" Level Scores by Religion, Broken Down by Gender and Class*

	1973	1979	1985
Protestant			
Male	9.6	9.6	9.9
Female	10.4	9.1	9.9
Non-manual	10.2	9.7	10.2
Manual	9.0	8.5	9.3
Catholic			
Male	9.5	8.3	9.1
Female	9.6	8.3	8.9
Non-manual	9.6	8.9	9.4
Manual	9.5	7.5	8.5

Generally, Protestant "A" level scores for those from non-manual backgrounds have been consistently higher than for Catholics from the same backgrounds. The same picture emerges for those from manual backgrounds in the 1979 and 1985 cohorts. There are also consistent differences when gender is considered alongside religion. The Protestant male mean was very similar to that of the Catholic male score in 1973 but, with the expanding cohorts of the 1970s and early 1980s, more lower scoring Catholics entered opening up a gap of around 1 point by 1985. The same situation prevails for females with Catholic females also 1 point below the Protestant average.

We can now go on to consider the courses taken by Protestants and Catholics in higher education (Table 7).

The pattern of courses studied does show some changes over this period.

Table 7: *Higher Education Courses Studied by Religion**

	<i>Health</i>	<i>Eng/Tech</i>	<i>Sci</i>	<i>Soc/Ad/Bus</i>	<i>Langs/Arts</i>	<i>Other</i>
Protestant						
1973	11.8	10.1	20.4	27.0	15.6	15.1
1979	11.6	11.0	19.6	27.6	13.6	16.6
1985	11.5	13.1	23.2	29.6	15.3	7.3
Catholic						
1973	8.1	7.2	18.8	30.2	20.7	15.0
1979	9.1	8.0	16.0	36.2	11.2	19.4
1985	9.7	12.3	19.9	38.1	13.5	6.4

*Row percentages.

In terms of the Catholic profile two trends are evident. First is the undoubted growth in the proportions studying Engineering and Technology, and second is the decline in the proportion taking Languages and Arts and the "Other" category and the rising proportions in Social/Administrative and Business Studies. Within this latter category, Catholics are far more likely to be in the "Social" rather than the "Business" courses. Although the data are not presented here, examining the pattern of courses studied in 1985 by religion and gender reveals Catholic females to have the lowest representation in the scientific and engineering categories. Examining the mean "A" level scores for 1985 also reveals that Catholics record lower "A" level scores than Protestants across each of the categories of courses studied. These differences are especially marked for the Engineering/Technology category where the Protestant mean is 9.5 and the Catholic mean 8.1 ($F < .001$).

Destinations

The final part of this analysis is to consider the institutional locations of entrants. The general trends in the migration of Northern Ireland students in the past decades has already been outlined. In this section the social and educational characteristics of those who leave Northern Ireland to study can be compared with those who remain. The policy implications of these trends will be picked up in the final section.

From the data it is clear that those who leave Northern Ireland to study are distinctive in social terms: Protestants are far more likely to study in Britain than Catholics and the proportion has edged up to just over 4 in 10 in 1985, approximately twice the proportion of Catholics. The proportions of those entering institutions in the Republic of Ireland has fallen in general

Table 8: *Destinations of Entrants by Class, Gender and Religion**

	<i>Northern Ireland</i>	<i>Britain</i>	<i>Republic of Ireland</i>
1973			
Non-manual	57.8	35.4	6.8
Manual	69.4	25.5	5.1
Male	61.4	33.2	5.5
Female	58.9	32.5	8.7
Protestant	59.9	37.2	2.9
Catholic	64.5	22.9	12.6
1979			
Non-manual	62.1	33.2	4.7
Manual	71.0	25.3	3.7
Male	67.3	29.2	3.5
Female	67.2	27.4	5.4
Protestant	58.9	37.8	3.7
Catholic	74.5	18.3	7.3
1985			
Non-manual	60.6	38.7	1.7
Manual	73.7	25.5	0.8
Male	66.1	32.6	1.3
Female	63.5	35.0	1.6
Protestant	56.6	41.9	0.5
Catholic	75.4	22.2	2.5

*Row percentages.

but remains a more significant destination for Catholics. There are no substantial differences between males and females in study destination but there are major differences in terms of social class. Students from non-manual backgrounds are far more likely to leave Northern Ireland to study (40.0%) than those from manual backgrounds (24.7%). These social characteristics have remained fairly constant over time with perhaps the edging up of the proportion of Protestants who study in Britain the main trend. Those leaving to study outside Northern Ireland are also distinctive in educational terms. The educational characteristics of "leavers" and "stayers" can be examined in terms of "A" level scores and courses studied.

The basic mean scores of "stayers" and "leavers" are shown in Table 9.

Table 9: *Destinations and "A" Level Scores*

	Mean "A" Level Scores		
	1973	1979	1985
Northern Ireland	9.0	8.4	9.0
Great Britain/ Republic of Ireland	11.1	11.0	10.4

On average those who stay in Northern Ireland have lower scores and, by and large, this situation has been quite static. These mean figures hide quite important aspects of the situation which can best be revealed by a more detailed consideration of 1985 data. Amongst those going to Britain to study, two-thirds attend universities (67.6%) with a third at polytechnics and other colleges. Those entering universities have mean "A" level scores of 12.2 while those entering polytechnics have a mean score of 6.5. There is, therefore, a substantial "tail" of more modest achievers who leave Northern Ireland (thereby bringing down the mean figure in 1985). (The effects of the wider spread of secondary attainment can also be seen when the results of degree courses are considered. Among the 1979 cohort, those who studied in Britain showed the highest proportions of those who attained a first class degree and those who failed to complete a higher education (Miller *et al.*, 1988a)). Amongst the highest "A" level achievers, that is those scoring 15 points or over, just over half leave Northern Ireland (53.8%) whereas for those scoring 9 points or more, 57.7 per cent remain in Northern Ireland to study. In terms of courses studied, those leaving to study outside Northern Ireland are generally studying the same range of courses as those who stay, although health courses figure rather more prominently among those leaving (along with specialist courses not available in Northern Ireland such as those in Veterinary Science).

IV DISCUSSION

Our discussion relates to two broad policy areas before we conclude with a general summary. The first policy area relates to the continuing concern in official circles over the "brain drain" from Northern Ireland. The second area relates to the possible effects of potential policy developments within higher education. The final area for consideration relates to the way in which the proposals to greatly strengthen equal opportunity policies in Northern Ireland impinge on higher education.

With the publication by the research team of earlier reports on the outflow of new entrants to higher education to institutions outside the Province and the demonstration that the majority of those who left were unlikely to return several years after the graduation (Cormack *et al.*, 1986; Osborne *et al.*, 1987; Miller *et al.*, 1988a) considerable concern has been expressed about a "brain drain". From the data we have presented here, there is no doubt that the institutions in Northern Ireland do lose a proportion of the best qualified entrants. We have also been able to show, however, that there is a considerable "tail" of more modest achievers who leave the Province to study in particular in polytechnics in Britain. If the proportion of students who leave is now increasing, as the most recent figures suggest, then this concern may grow. A positive product of this outward flow of entrants, however, has been the steady increase in the proportion of the age-18 cohort in Northern Ireland entering higher education, resulting in a notably higher Age Participation Rate in Northern Ireland compared with Britain (DES, 1987). However, aside from the concerns of the institutions with entrants, public officials have expressed concern at the loss of graduates especially those with technological and scientific skills argued to be vital to reviving the ailing economy of Northern Ireland. It has still to be demonstrated, however, that these losses are any worse than those experienced in either the rest of Ireland or similarly economically depressed parts of the UK (see Osborne *et al.*, 1987 and Miller *et al.*, 1988a for a fuller discussion).

Perhaps the area of policy innovation which would have the greatest impact on the characteristics of participation we have described would be the introduction of a loans policy to replace the existing student grant system. Survey evidence collected in 1986 demonstrated that students from manual backgrounds and Catholics were most likely to be deterred from entering higher education by a loans policy (Cormack *et al.*, 1986). The current review being undertaken by the UK government reportedly will recommend a "top-up" loan to supplement the existing grant system. Whether such a hybrid system will have as clear a disincentive effect as a full-blooded loans policy is not known.

Apart from these possible alterations to the student support system, other

developments could alter the patterns of participation. The EC ruling on the right of EC nationals to study in member countries on the same basis as individuals from the country concerned is having a major impact on higher education in the UK. Since in the UK tuition fees for students are paid from public funds, individuals from other EC countries studying in the UK are entitled to have their fees paid as well. The result has been a substantial rise in applications from individuals in the Republic of Ireland to institutions in Britain and Northern Ireland. A combination of factors including the supply of places exceeded by the demand, high tuition fees and the limited availability of grants in the Republic of Ireland make studying in the UK an attractive option. Moreover, some parts of the UK (e.g., Scotland) are facing a major decline in student demand thereby making a supply of new entrants an attractive prospect. In Northern Ireland the percentage increase in applications from the Republic has been enormous although numbers of entrants, despite increasing, have yet to match applications. This increase in applications has posed acute problems for Admissions Officers – how does a good Leaving Certificate configuration compare to an “A” level applicant? If these applications are for undersubscribed courses or at locations where overall demand is low then the issue is less acute. However, where this is not so then it will be the more modest “A” level achiever who will be vulnerable. As we have seen, those from manual backgrounds and Catholics are overrepresented in these groups. A solution to this problem would lie in granting additional funding to accommodate students from the Republic of Ireland. In this way, the potentially highly charged issue of “displacement” could be dealt with. (See Osborne and Cormack (1985) where this policy was first advocated.)

A further source of change in the profiles of participation could come from the continuing pressure by government towards the sciences and technology. On current patterns, once again it would be women, Catholics and those from manual backgrounds who would be disadvantaged. However, there is some evidence that the subject balances of these groups at “A” level may be changing (Osborne and Cormack, 1988). The advent of a National Curriculum with the prescription of certain subjects may enhance this development (DENI, 1988).

Finally, following the merger of the Ulster Polytechnic with the New University of Ulster to form the University of Ulster in 1984 there has been a general tightening in the merged institution of entry grades. This may have had a particular effect on those groups identified as having a profile of lower qualifications. This may result in such students seeking entry to institutions elsewhere (particularly polytechnics in Britain), in entering non-degree courses in the same institution or not entering higher education. This area would repay further investigation.

The second policy area to be considered relates to equal opportunities policy in Northern Ireland. Since 1976 in Northern Ireland there has been statutory provision to eliminate discrimination and promote equality of opportunity on the basis of religion and gender. Indeed both universities are, at the time of writing, under investigation by the Fair Employment Agency and government has announced its intention to strengthen policy in relation to religion (HMSO, 1988). The outcomes of these investigations or the effects of strengthened equal opportunities policies are presently unclear and beyond the concerns of this paper. It is quite clear, however, that both universities in Northern Ireland will be required to monitor their pattern of recruitments and promotions to all posts, academic and non-academic, in terms of religious affiliation. The monitoring of student enrolments *may* also come under the terms of the new policy (since many courses provide direct training and certification for entry to jobs) although whether this will be a requirement is not clear. Under the new policy proposals, however, there can be little doubt that the output of graduates for subject disciplines by religion from the two institutions will of necessity form a vital component in the construction of "labour availability estimates" against which the recruitment of employers will be measured. The two universities in Northern Ireland, as major employers and as educational and training establishments, are set to become drawn into a major area of public policy which they have hitherto regarded as tangential to their primary concerns.

Summarising the detailed patterns and trends in higher education participation in Northern Ireland is not easy. The data, spanning the early 1970s to the mid-1980s, however, reveal rising participation levels which are now above those in Britain. Catholics and women have notably increased their participation levels while those from manual backgrounds have sustained their position which is generally above that in Britain. This expansion of higher education opportunity is a very positive feature of Northern Ireland to set alongside the often-quoted negative characteristics. Opportunities have been available and taken. This expansion of opportunity has not been a matter of deliberate policy development. It has been secured partially through rising levels of attainment in schools, and the individual decisions of students to study outside Northern Ireland have also created the "space" for additional students in Northern Ireland. It *has* required policy support, however, to sustain and expand provision *in* Northern Ireland and to sustain the extra costs arising from student grants when there has been pressure (for financial reasons) to bring overall participation levels in line with the "norm" in Britain. In an era of public expenditure restraint, this is an achievement of note. It would be wrong, however, to be complacent. Changes in student financial support systems and/or further restraint in public expenditure could greatly reduce

participation and shut down opportunities for those who have no other avenues to choose. The social and political implications of such developments should be pondered carefully by those who make policy decisions for Northern Ireland.

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