

APPENDIX A
SAMPLE DESIGN, WEIGHTING AND SAMPLING ERRORS

Sample Design

Each Annual School Leavers Survey is based on a national stratified random sample of school leavers, who are interviewed approximately one year after leaving school. A school leaver is defined as someone who left full-time education in an official secondary, vocational, community or comprehensive school in the course of the previous academic year, i.e., the period September of t-2 to August of t-1 where t is the year the survey is being carried out. The present survey, conducted in 2004, covers those who left the second level system between September 2002 and August 2003.

The sample design used in 2004 was considerably modified and improved compared with that utilised in earlier years. A stratified (by program) random sample of school leavers was selected from an anonymised list provided by the Department of Education and Science¹.

Stratification was based on program code and program year. As part of the 2004 survey, the DES requested a separate report on the PLC sector. In order to ensure that adequate numbers of PLC leavers were interviewed to provide a separate analysis of this group, the PLC sector was oversampled. In addition, as in previous years, the non-Leaving Cert group was also oversampled to provide a higher number of cases for analysis of their early labour market experiences.

The identification numbers of the selected sample was sent to the DES who wrote to each of the selected leavers to inform them that the survey was taking place and offered them the opportunity to opt out of the survey. Having allowed time for the leavers to opt out, the DES supplied the ESRI with names and addresses of leavers, from which the field sample was selected².

Rows 1 and 2 of Table A1 below show the estimated numbers of leavers in each stratum and the size of the target field sample selected. Only those under age 25 are included, as this is the group to which the present report refers³.

¹ In previous years, a two stage, random stratified design was used, with selection of schools at the first stage and pupils from the selected schools in the second stage. The schools were then requested to provide the contact details for the selected students.

² The selected sample was larger than needed as it was uncertain what proportion of leavers would opt out before the fieldwork.

³ Apart from PLC leavers, very few students are over age 25. A separate report on PLC leavers includes those PLC leavers over age 25.

Fieldwork and Response

Trained interviewers, who were fully instructed on the survey, attempted to contact and interview these selected school leavers throughout the country. The final row of Table A1 show the response achieved by these interviewers. Overall, the response rate achieved was 53 per cent. The response rate varied from 66 per cent among Leaving Cert students to 28 per cent among those who left before the Junior Cert. The low response rate in the latter category is mainly due to the large numbers of leavers and their families who had left the area and left no forwarding address (24 per cent).

The fifth row of Table A1 shows the sampling fraction in each stratum, i.e., the proportion of pupils interviewed in each sub-group. This varies from 45 per cent of leavers with no qualifications to 3 per cent of those leaving with the Leaving Certificate. All the tables in the report have been re-weighted taking account of these sampling fractions to give unbiased estimates of the relevant population percentages, averages and totals.

Margins of Error for Key Statistics

Given the nature of the sample design, the calculation of sampling errors is quite complex. It was also felt that the presentation of the margin of error for all the figures given in the report would make it difficult to read. In order to give the reader an appreciation of the likely magnitude of the sampling errors involved, we carried out calculations for a number of the key percentages presented in the text and these are shown in Table A2. In the first of these examples, we show the margin of error (at the 95 per cent confidence interval) for the hypothetical case of a variable which was observed to have a value of 50 per cent in each stratum. The overall confidence interval is seen to be plus or minus 2 percentage points, i.e., given the observed value of 50 per cent in each stratum of the sample, there is a 95 per cent probability that the true value (in the population) lies in the range 48 to 52 per cent. The confidence interval is, of course, wider in the strata where the sample is smaller. Thus, the margin of error is 3 per cent in the stratum "Junior Cert" where only 995 respondents were interviewed.

The other lines of Table A2 show similar figures for actual percentages observed in the survey. The first of these is the percentage of all leavers unemployed in May 2004. Here the margin of error varies from 1 per cent for the sample as a whole to 6 per cent for those leaving with no qualifications. The other three variables considered are based on sub-groups of the sample (those in the labour force, those at work and situations where the school leaver personally responded to the survey). Note that for sub-groups such as these the sampling errors tend to be larger. In general, readers should bear in mind that the sample size is relatively small for such subgroups and that figures based on small sub-groups of the sample

must be treated with great caution.

Table A1: Estimated Numbers of Leavers under Age 25 in Various Categories and Details of Sample

	Stratum (Stage Left)					Total
	Before Junior Cert year	Junior Cert Program year	LC program, year 1	LC program, year 2	PLC program	
No. in Population	1871	4012	4423	45607	12027	67940
Opted out	216	298	178	224	78	916
Not eligible*	111	183	122	97	198	711
Eligible Field Sample	838	1174	811	1554	1375	5752
Sampling Fraction	45%	29%	18%	3%	11%	8%
Achieved Sample	231	574	462	1032	732	3031
Response Rate	28%	49%	57%	66%	53%	53%

Excludes those over age 25 and VTOS students. Ineligible=deceased, left school outside the reference period, still in school . Note that the stratum refers to the program and year in which the person left school: the examination might not have been taken.

Table A2: Illustrative Sampling Errors By Self-Reported Highest Qualification of School Leavers Age 25 and under (2004 Survey)

Illustrative Sampling Errors	No Quals.	Junior Cert	Leaving Cert	PLC	Total
Illustrative Observed Percentage	50%	50%	50%	50%	50%
Number of cases	298	995	1190	511	2994
Margin of error at 95% Confid. Level	6%	3%	3%	4%	2%
Unemployment Level	50%	24%	6%	7%	11%
N cases, all economic statuses	298	995	1190	511	2994
Margin of error at 95% Confid. Level	6%	3%	1%	2%	1%
Unemployment Rate	68%	29%	17%	11%	21%
N cases in labour market	227	838	560	355	1980
Margin of error at 95% Confid. Level	6%	3%	3%	3%	2%
Percentage Employed in Manufacturing	35%	47%	27%	12%	28%
N cases employed	73	629	657	357	1716
Margin of error at 95% Confid. Level	11%	4%	3%	3%	2%
Percentage in Professional Services sector	2%	2%	3%	8%	4%
N cases employed full-time	73	629	657	357	1716
Margin of error at 95% Confid. Level	3%	1%	1%	3%	1%
Percentage Sat. with Emp. Sit.	58%	75%	79%	75%	77%
N cases responding	286	963	1171	495	2915
Margin of error at 95% Confid. Level	6%	3%	2%	4%	2%

Note: Self-reported qualification may differ from stage left if the person did not take the exam at the end of the period.

Unemployment level refers to the percentage of all leavers who are unemployed; unemployment rate refers to the percentage of leavers in the labour market who are unemployed.