

## **DECLINE IN THE NUMBER OF STUDENTS TAKING LEAVING CERTIFICATE ACCOUNTING: TEACHERS' PERSPECTIVES**

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Over the last decade there has been a sharp decrease in the number of students choosing to take Accounting in the Leaving Certificate Examination. In the study described in this paper, teachers' views on the reasons for this decline were elicited. The main reasons identified were problems with the content and teaching of accounting in the earlier Junior Certificate Business Studies course, perceived difficulty in obtaining high grades, the volume of material to be covered, and active promotion of other subjects, particularly the physical sciences. Implications of the decline for second- and third-level educators and the accounting profession are considered.

In 1969, four business subjects, Accounting, Business Organisation, Economics, and Economic History, were introduced at senior cycle in Irish second-level schools. On introduction, Accounting was by far the most popular. Over the last decade, however, there has been a sharp decline in the take-up of the subject with the lowest ever percentage of students taking the Leaving Certificate (LC) Accounting examination in 2002.

Accounting is not offered as a separate subject at Junior Certificate (JC) level but is part of the Business Studies syllabus. Since over two-thirds of students take JC Business Studies, for nearly all students taking LC Accounting it is not their first experience of the subject. The JC Business Studies syllabus, which replaced the previous syllabus, Commerce, was introduced in 1989 and was first examined in 1992. It promotes an integrated approach to business education and states 'that the old division between business methods and bookkeeping should be avoided' (Department of Education, 1988a). There are two examination papers, the structure of which gives teachers and students the opportunity to limit their exposure to accounting. This contrasts with the previous Commerce examination where one of the two examination papers was completely devoted to accounting.

Following the introduction of Accounting as a separate subject for the Leaving Certificate in 1969, the syllabus remained unchanged until 1995 when a revised syllabus, which was first examined in 1997, was introduced. The syllabus is examined at two levels, Ordinary and Higher. In some syllabus

topics, which are designated Higher Level only, students are expected to demonstrate a greater depth of knowledge and understanding of concepts and issues, as well as a greater proficiency in skills, applications, and analysis (Department of Education, 1995a). At both levels, the subject is assessed in a three-hour written, terminal, closed-book examination

Table 1  
*Percentages of Candidates Taking the Leaving Certificate Examination in Accounting, and the Ratio of Higher to Ordinary Level Candidates, 1971-2002*

Year	% Taking Accounting	Ratio of Higher : Ordinary	Year	% Taking Accounting	Ratio of Higher : Ordinary
1971	28.1	39:61	1989	27.5	58:42
1972	27.2	31:69	1990	28.8	59:41
1973	19.4	39:61	1991	26.7	58:42
1974	18.7	43:57	1992	26.3	60:40
1975	20.1	42:58	1993	24.5	60:40
1976	19.7	44:56	1994	20.5	62:38
1977	20.3	46:54	1995	18.8	63:37
1978	20.5	51:49	1996	17.4	66:34
1979	21.4	48:52	1997*	15.9	65:35
1980	23.7	47:53	1998	15.4	66:34
1983	23.2	52:48	1999	14.8	65:35
1984	24.9	53:47	2000	14.2	66:34
1987	25.4	59:41	2001	13.1	67:33
1988	26.6	60:40	2002	12.8	67:33

\* first year revised syllabus was examined

Data for 1981, 1982, 1985 and 1986 were not published by the Department of Education.

Source: Department of Education (1971-1988b, 1989-1995b, 1996); Department of Education and Science (1997-2001b, 2002b)

Over the years, the popularity of Accounting has varied (Table 1). In 1971, 28.1% of LC students took an examination in the subject. Over the next four years the percentage fell. The largest fall occurred in 1973, when the examination was taken by students who had commenced their LC studies in 1971, the year the subject was first examined. The subject then showed an upward trend and reached its peak (28.8%) in 1990. Since 1990, the subject's popularity has been falling. There was a substantial fall in 1994, which was the year in which the first cohort of LC students to complete the new JC Business

Studies course took the examination. In 2002, the lowest ever percentage of students (12.8%) took the Accounting examination. It is clear that the introduction of the revised syllabus in 1995 failed to curb the decline in the subject's popularity. Up to the introduction of the revised syllabus, the general trend was for an increasing number of candidates to take the Higher Level paper. This suggests that the drop in the number taking the subject was greater among Ordinary Level students. While likely, this is not certain, as there could have been a movement of students from Ordinary to Higher Level. Since the revised syllabus was introduced, the ratio of Higher to Ordinary Level examination candidates has steadied, with approximately two-thirds taking the subject at Higher Level. In recent years, slightly more females than males took Accounting, which mirrors the pattern for the overall LC Examination.

In Table 2, the popularity of Accounting is compared with the popularity of other subjects taken by more than 10% of LC candidates (with the exception of English, Irish, and Mathematics which are taken by practically all candidates). From being one of the ten most popular subjects until 1995, Accounting is now ranked 14th and has been overtaken by German, Art, Construction Studies, and Physics.

Over the last decade the percentage of schools teaching LC Accounting has varied between 79% and 85%. Fewer schools provide German, Art, Construction Studies, and Physics, the subjects that have overtaken Accounting in popularity. If the demand for these subjects continues to increase, there may be pressure on schools to replace Accounting with these subjects, and teachers claim that once a subject is dropped it is very difficult to have it reintroduced. Surprisingly, in contrast to the majority of subjects, the size of school impacts on the provision of Accounting. It is one of only three subjects with significant variation in provision depending on school size (Department of Education and Science, 2001a). In 1999/00, only 51.7% of small schools (with less than 300 pupils) offered Accounting. Thus, many students attending small schools who may wish to study Accounting do not have the opportunity to do so.

Research that focuses on subject take-up has concentrated on identifying the factors that influence students' decisions about subject choice. Studies have emphasized the importance of a broad range of variables such as career relevance, interest value, gender, family background, student ability, prior experience of a subject, school characteristics, and expected performance (Adey & Biddulp, 2001; Francis, 2000; Garratt, 1985; Ó Maoldomhnaigh, 1993; Smyth & Hannan, 2000; Stables, 1990). While some of these variables may be relevant, the focus of the present study was to identify reasons for the decline

Table 2  
*Percentages of Candidates Sitting Leaving Certificate Subjects, 1997-2002*

Rank	1997	%	1998	%	1999	%	2000	%	2001	%	2002	%
4	French	58.2	French	57.8	French	58.7	French	59.2	French	59.7	French	57.9
5	Biology	49.2	Biology	47.7	Geography	47.9	Geography	50.0	Geography	51.1	Geography	51.3
6	Geography	46.2	Geography	46.2	Biology	45.8	Biology	43.9	Business	42.8	Business	42.6
7	Home Econ	37.7	Home Econ	37.7	Business	39.1	Business	41.6	Biology	42.5	Biology	39.8
8	Business	37.0	Business	37.5	Home Econ	36.5	Home Econ	35.8	Home Econ	34.2	Home Econ	33.1
9	History	24.0	History	23.1	History	21.7	History	20.8	History	19.9	History	19.5
10	German	18.3	German	17.7	German	17.2	German	16.9	German	16.6	German	15.7
11	Art	17.2	Art	16.1	Art	15.9	Art	16.3	Art	15.9	Art	16.6
12	Accounting	15.9	Accounting	15.4	Accounting	14.8	Const Stud	14.3	Const Stud	14.8	Physics	15.6
13	Physics	15.6	Physics	15.1	Physics	14.5	Accounting	14.2	Physics	14.8	Const Stud	15.4
14	Const Stud	14.0	Const Stud	13.4	Const Stud	13.8	Physics	14.1	Accounting	13.1	Accounting	12.8
15	Tech Draw	12.9	Tech Draw	11.7	Tech Draw	12.0	Tech Draw	11.1	Tech Draw	11.3	Chemistry	11.7
16	Chemistry	11.8	Chemistry	11.4	Chemistry	11.1	Chemistry	11.1	Chemistry	11.2	Tech Draw	10.9

English, Irish, and Mathematics have been omitted as they are taken by practically all candidates.

All other LCE subjects taken by 10% of candidates are included.

Home Econ: Home Economics (Social & Scientific); Tech Draw: Technical Drawing; Const Stud: Construction Studies.

Source: Department of Education and Science (1997-2001b, 2002b).

in a specific subject rather than the factors that influence subject choice in general. This was achieved by eliciting Accounting teachers' views on potential factors contributing to the subject's decline in schools. Focusing on teachers was considered justified as they are seen as expert practitioners, whose contributions are valued for their clear, rational, considered and logical perspective (Van Rooy, 2000). O'Donovan (1993) recognizes that due to their depth of assessment experience, teachers have much of value to say about the Irish examination system. Adey & Biddulph (2001) note that teachers are in a position to send subtle messages to students on the nature of individual subjects. Teachers can also influence the future of Accounting by lobbying their teaching associations and commenting in the media.

#### METHOD

##### *Instrument*

A questionnaire was designed to assess teachers' experiences and views of the LC Accounting programme. It contained open and closed questions and concluded with a request to respondents to give details of any issues which they would like to bring to our attention. Prior research into students' experiences of LC Accounting (Byrne & Willis, 1997; Byrne & Willis, 2001) and discussions with teachers highlighted possible reasons for the decline in the subjects' popularity. To confirm the validity and significance of these reasons, one section of the questionnaire, which is the focus of this paper, asked teachers to indicate their strength of agreement or disagreement with each of eight reasons using a 5-point Likert scale (1 = very unimportant; 5 = very important). The reasons listed were: active promotion of other subjects; increasing career opportunities in other areas; perceived difficulty in obtaining high grades; poor foundation at Junior Certificate level; poor public image of accountants; shortage of accounting teachers; stereotyped image of accountants as boring; and too much material to be covered. Respondents were also asked to identify any additional reason(s) for the decline. While 35% gave other reasons, many of these overlapped with the ones listed and no further major reasons were identified.

Respondents were also asked, separately for Higher and Ordinary Level, (i) if they covered the full syllabus with their students (Yes/No) and (ii) if they believed they had sufficient time to cover all the topics on the syllabus (Yes/No). They were also asked if they believed that Junior Certificate Business Studies was a good foundation for Leaving Certificate Accounting (Yes/No), and if not, to state why.

### *Procedure*

Accounting teachers were invited to attend a seminar in Dublin City University in January 2001. Of the 743 invited, 193 accepted, and approximately 150 attended. At the end of one of the seminar sessions, the teachers were invited to complete the questionnaire. A total of 138 usable replies were received. It should be noted that the way in which respondents were selected restricts the extent to which conclusions might be generalized.

The mean number of years since the respondents obtained their first qualification was 22.4 years, indicating that this was a very experienced group of teachers. Ninety-three percent held a business degree, and 5% a master's qualification. The respondents taught a wide range of subjects; all taught at least one other subject, and 94% taught Business at either LC or JC level, or both.

### RESULTS

*Poor Foundation at Junior Certificate Level.* Of the eight reasons listed for the decrease in numbers taking Accounting in the LC Examination on the teacher questionnaire, the one that received the highest rating was a poor foundation at JC level. When asked their views on JC Business Studies, two-thirds of respondents said that they believed it did not provide a good foundation for LC Accounting. Three main reasons were cited: the bookkeeping element of the syllabus could be avoided; there was insufficient time to adequately cover the syllabus; and there was too much emphasis on general business topics and not enough bookkeeping. One respondent suggested that 'students don't seem to get enough in-depth knowledge of accounting during the course; as a result Accounting is now seen as an elite subject chosen only by "brighter" students'.

Table 3

*Mean Scores of Teachers' Responses to Questionnaire Items: Reasons for the Decline in Popularity of Accounting*

Reason	Mean	SD
Poor foundation at Junior Certificate level	4.52	0.86
Perceived difficulty in obtaining high grades	4.46	0.72
Too much material to be covered	4.24	0.92
Active promotion of other subjects	4.24	0.89
Increasing career opportunities in other areas	3.49	1.19
Shortage of Accounting teachers	3.27	1.27
Stereotyped image of accountants as boring	3.04	1.19
Poor public image of accountants	2.87	1.16

Another respondent highlighted one of the reasons why the bookkeeping element of the syllabus was being avoided: 'The students find theory questions far easier and less time-consuming than bookkeeping questions and the majority think that anyone who chooses to do the bookkeeping questions are either very "brainy", "swots" or "crazy"'. Other respondents indicated that there is a problem in schools where JC Business Studies is taught by non-business graduates who have insufficient accounting knowledge and hence avoid teaching the accounting sections of the syllabus. Of the 44 respondents who said JC Business Studies provides a good foundation, 23 qualified their answer with most referring to the need to ensure that the accounting element was well taught.

The structure of the JC Business Studies examination facilitates the omission of much of the accounting sections of the syllabus. One respondent, while having positive views on JC Business Studies, made a worrying comment that 'advice was actually given at a Junior Certificate inservice course to tell students to avoid accounting in order to achieve a better result'. Many others observed that students who avoid the accounting questions still achieve high grades. Clearly, teachers are concerned about JC Business Studies and the way it is taught. It was the issue referred to most often in the section of the questionnaire inviting additional comments.

*Perceived Difficulty in Obtaining High Grades.* The perceived difficulty in obtaining a high grade in the LC Examination achieved a mean score close to that achieved by a poor foundation at JC level as a reason for the decline in the popularity of Accounting.<sup>1</sup> Anecdotal evidence suggests that LC students also perceive that it is more difficult to achieve a high grade in Accounting than in other subjects, something that is likely to discourage students from studying the subject<sup>2</sup>. Since the introduction of the revised syllabus, the number of A grades awarded in Higher Level Accounting is actually greater than in other popular subjects. However, this may be attributed, at least partially, to differences in candidates' academic abilities, rather than to the fact that it is easier to achieve an A grade. Studies of the LC Examination in the 1990s indicate that the overall scholastic ability of candidates taking Higher Level Accounting was very high (Kellaghan & Dwan, 1995; Martin & Hickey, 1992). There is no reason to suspect that this has changed. Indeed, one respondent observed that 'the high percentage of As reflects the higher standard of pupils taking the subject'.

<sup>1</sup>The issue of the comparability of grades across subjects, and ways to address perceived lack of comparability, have been matters of concern in Britain (see, e.g., Fitz-Gibbon & Vincent, 1995).

<sup>2</sup>In the UK, Ashworth & Evans (2000, 2001) concluded that severe grading in A-level Economics contributed to the decline in that subject's popularity.

However, high overall scholastic ability is not invariably associated with a high proportion of high grades. For example, students who take both Accounting and a physical science subject (for which the overall scholastic ability of candidates is higher than for Accounting) were awarded a higher mean score in Accounting than in either Physics or Chemistry (Millar & Murphy, 2002).

*Too Much Material to be Covered.* The volume of material to be covered in the subject ranked joint third among the reasons given by teachers for the decline in popularity of Accounting, and as contributing to the real or perceived difficulty of the subject. Seven in ten (71%) teachers did not believe they had sufficient time to cover all the topics on the Higher Level syllabus, while 41% believed they had insufficient time to cover the Ordinary course. When asked if they actually covered the full syllabus with their students, 30% replied that they did not at Higher Level and 25% did not at Ordinary Level. Depth of coverage was also a concern: one respondent commented that 'as the course is so long we must move from topic to topic very quickly'.

*Active Promotion of Other Subjects.* The active promotion of other subjects was the other main reason cited for the decline in the number taking LC Accounting.

*Other reasons.* Teachers believed that increasing career opportunities in other areas influenced some students in their decision not to study Accounting. Some respondents saw the shortage of Accounting teachers as a reason for the decline in the subject. This is more likely to be an issue in small schools. Shortage of teachers may also explain why in some schools JC Business Studies is taught by teachers without adequate accounting knowledge. The least important reasons given by teachers for the decline in the subject were the poor public image of accountants and the stereotypical image of accountants as boring.

#### CONCLUSION

There has been a sharp decline in the number of students opting to study Accounting at second level in Irish schools. In an effort to generate debate on the topic and to help identify means of re-stimulating demand for the subject, the study described in this paper sought teachers' views on possible factors contributing to the decline. The study reveals that teachers are seriously concerned about the poor foundation provided by JC Business Studies, which they consider to be a key factor in the fall in popularity of Accounting. The perceived difficulty in obtaining high grades in Accounting and related concerns over the volume of material to be covered in the syllabus were also identified as having an adverse impact on students' decisions to study the subject. The active



promotion of other subjects, particularly science subjects, was another reason cited for the fall in popularity of Accounting. In recent years, major concern has been expressed about diminishing numbers taking second-level physical science subjects, which have led to active promotion of these subjects by the science industry and by bodies such as the Institute of Chemistry in Ireland. Furthermore, in November 2000, the Minister for Education and Science established a task force to address the downturn in the number studying the physical sciences in Irish schools and colleges (Department of Education and Science, 2002a). To reverse the decline in Accounting, educators and the accounting profession may need to initiate similar activities to promote and support Accounting and encourage second-level students to study the subject.

If students are to be encouraged to undertake further studies in a subject, it is important that their first experience of that subject is positive. A poor initial course is unlikely to stimulate interest in a subject. For example, Garrat (1985) identified interest value as one of the most influential factors in subject choice. A poor foundation in a subject not only has implications for the take-up of the subject, but also has a profound impact on students' subsequent approaches to learning the subject (Prosser & Trigwell, 1999; Ramsden, 1992). Results of the study reported in this paper indicate that teachers are critical of both the content and teaching of JC Business Studies. This points to the need to review the JC Business Studies syllabus and assessment to ensure that students' first experiences of accounting are positive.

Many respondents in the survey were conscious of the fact that prospective students perceived Accounting to be a difficult subject to study. For example, one claimed that 'Accounting has the reputation of being difficult', while another commented 'when offered as an option to Business, Accounting is definitely perceived to be more difficult'. Another respondent referred to the 'impression that you must put in a disproportionate effort for the result you get in return'. Regardless of the reality, if the subject is perceived as more difficult or as requiring more effort and time than competing subjects, the perception will have a detrimental impact on the numbers choosing the subject. It is important that a grade in a public examination represents the same standard of achievement, regardless of the subject in which it is awarded, particularly when examination results are used to determine the allocation of third-level places. Since in this environment students are extremely conscious of the need to maximize their grades, they will select subjects which they perceive offer them the best opportunity of gaining high grades.

To address teachers' concern that the volume of material to be covered in Accounting discourages students from taking the subject, it is important to

ensure that the workload is reasonable, since having sufficient time to adequately cover a syllabus is seen as a precondition of good learning (Chambers, 1992). As the revised syllabus has been in place since 1995, it is now timely to review it to ensure the workload is manageable.

Maintaining viable student numbers is a concern for teachers as low numbers result in Higher and Ordinary Level students being taught together, which is perceived to create a difficult teaching and learning environment (Byrne & Willis, in press). Very low numbers may also lead schools to stop offering a subject. Although LC Accounting is not a prerequisite for third-level accounting programmes, these programmes mainly attract students who have previously studied the subject. Hence, the downturn in the subject should also be of concern to third-level educators. Furthermore, as the accountancy profession in Ireland predominantly attracts graduates who have specialized in accounting, a decline in LC Accounting may ultimately affect recruitment to the profession. However it appears that the accounting profession in Ireland is not concerned about the decline in numbers taking Accounting in the Leaving Certificate Examination, an oversight that may have an adverse affect on future recruitment. If the profession is to attract its share of students, it should actively promote itself and ensure that second-level students are aware of the opportunities for interesting and rewarding careers in accounting.

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