

THE REVISED SECOND LEVEL ACCOUNTING SYLLABUS – A NEW BEGINNING OR OLD HABITS RETAINED?

Marann Byrne and Pauline Willis

Dublin City University Business School

ABSTRACT

A previous study of accounting at Leaving Certificate level highlighted serious issues concerning syllabus coverage, assessment and predictability of examination papers that were likely to have a negative impact on student learning at third level. It also revealed a significant drop in the popularity of accounting as a subject choice since 1990. This study investigates students' experiences of both the new Leaving Certificate accounting syllabus introduced in September 1995 and the revised examination paper structure. Analysis of questionnaire responses reveals a more comprehensive coverage of the new syllabus by both students and teachers. A review of the examination papers shows that there is a greater range of topics being examined under the new syllabus, though a substantial percentage of students still consider the examination to be highly predictable. In support of this viewpoint, the analysis of the examination papers reveals little variation in the form and content of questions for many of the topics common to both syllabi. This study also shows that the decline in the popularity of accounting at second level has continued.

INTRODUCTION

Over the past 25 years there has been considerable discussion and debate in the higher education literature on student learning and the factors that influence this learning (Marton and Saljo, 1976; Biggs, 1978; Entwistle and Ramsden, 1983; Marton, Hounsell and Entwistle, 1997; Prosser and Trigwell, 1999). This literature identifies students' prior experiences of a subject as a key factor in the student model of learn-

ing (Biggs, 1987, p. 9; Ramsden, 1992, p. 83; Prosser, Trigwell, Hazel and Gallagher, 1994). These researchers argue that students' previous experiences of studying a subject and their prior understanding of key concepts strongly influence their subsequent approaches to studying that subject and their learning outcomes. Despite this, accounting researchers have devoted little attention to the effect of prior educational experiences. This paper investigates Irish third level accounting students' experiences of Leaving Certificate accounting. The findings should assist third level accounting educators to develop a better understanding of their students.

PREVIOUS RESEARCH

To date there has been very little published research into the Leaving Certificate programme that is directly relevant to the current study. Breen (1986) noted that there was a virtual absence of published research into the Leaving Certificate examination. Since then research on second level education has mainly focused on issues such as gender and equality (Hannan, Smyth, McCullagh, O'Leary and McMahon, 1996); the points system (Humphreys and Jeffers, 1999) and predicting performance (Lynch, Brannick, Clancy and Drudy, 1999) rather than on specific second level subjects. Accounting education research in Ireland has focused on third level (Byrne, Flood and Willis, 1999) and the use of second level results in predicting third level performance (Clarke, 1995).

There has been only one published study on accounting at second level, which was undertaken by the current researchers (Byrne and Willis, 1997). That study (hereafter referred to as the prior study) highlighted serious issues concerning syllabus coverage, assessment and predictability of examination papers that were likely to have a negative impact on student learning. Following the introduction of a new Leaving Certificate accounting syllabus, the present study re-examines these issues to investigate whether the findings are still valid.

OBJECTIVES OF THE RESEARCH

The objectives of the research are to:

- Provide an overview of accounting within the Leaving Certificate programme

- Describe the new syllabus and examination
- Gather evidence on students' experiences and views of the revised Leaving Certificate accounting syllabus and examination
- Examine whether the principal findings of the prior study relating to syllabus coverage, assessment and predictability of examination papers are still applicable.

The objectives were achieved by collecting and analysing data from the Department of Education (and Science) Statistical Reports 1971 to 1999, past Leaving Certificate examination papers and a questionnaire distributed to first year BA in Accounting and Finance (BAAF) students in Dublin City University Business School (DCUBS).

LEAVING CERTIFICATE ACCOUNTING

Accounting as a separate subject was introduced into the Leaving Certificate programme in 1969 and was first examined in 1971. The popularity of accounting has varied significantly over its lifetime and the trend has been for an increasing number of students to take the higher level paper. **Table 1** shows the percentage of students taking the accounting examination from 1971 to 1999 and the proportion of students taking the higher and ordinary level papers. In 1971, 28.1 per cent of Leaving Certificate students sat the first accounting examination. The percentage then fell until 1974 after which it started on an upward trend, reaching its peak in 1990 with 28.8 per cent of Leaving Certificate students sitting the examination. Since 1990, the subject's popularity has been falling, with only 14.8 per cent of students taking the examination in 1999. A new syllabus was introduced in 1995 but it has failed to curb the fall in the subject's popularity.

A possible reason for the decline in the popularity of accounting may be the perception that it is difficult to achieve high marks in the subject. The Commission on the Points System (1999, p. 65) acknowledged that students' subject choices may be influenced by the perception that some subjects are likely to be marked "more easily" than others. The Association of Secondary Teachers in Ireland (1997, p. 10), in its submission to the Commission, commented that 'students frequently choose subjects which are perceived to offer the best chance of gaining high grades'. The Commission also stated that, at its public seminars, some second level students forcibly pointed out that the proportion of high

grades awarded for different subjects was a major factor in deciding what subjects to take for the Leaving Certificate.

Table 1: Popularity of Leaving Certificate Accounting 1971–1999

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

* *First year new syllabus was examined*

Note: The data for 1981, 1982, 1985 and 1986 are unavailable, as the Department of Education did not publish details of the number of candidates taking individual subjects in those years.

Table 2 shows the grades awarded at higher level in the most popular optional subjects for 1999 and reveals that more candidates achieved an 'A' grade in accounting than in the other optional subjects. This has been the pattern since the examination of the new syllabus. However, it does not necessarily mean that it is easier to achieve an 'A' grade in

accounting than in these other subjects. It is likely that the differences in grades can be attributed partially to differences in candidates' academic abilities. In a review of the 1994 examination results, Kellaghan and Dwan (1995) reported that the overall scholastic ability of candidates taking higher level accounting was very high, whereas the ability of students taking geography, home economics (social & scientific) and art was significantly lower. Martin and Hickey (1992) report the same findings for the 1991 examination. These are the only two years for which this information is available but, from discussions with accounting teachers, there is little reason to suppose that there has been a significant change in the profile of higher level accounting candidates. On the basis of the available evidence, it is not possible to conclude whether it is more difficult to achieve higher grades in accounting than in other optional subjects. The Commission on the Points System (1999, p. 66) calls for research to be undertaken to identify the cause(s) of the variation in existing patterns of grade allocation across subjects.

Table 2: Percentage Achieving Grades in the Most Popular Optional Subjects in the Higher Level Leaving Certificate Examinations – 1999

	A1	A2	B1	B2	B3	C1	C2	C3	Pass	Fail
French	5.3	5.1	6.4	8.1	9.7	10.6	11.7	11.7	27.4	4.1
Geography	2.2	4.4	4.2	8.9	11.9	12.8	13.6	13.0	24.4	4.7
Biology	4.4	7.3	7.8	9.4	11.2	9.6	10.4	10.4	21.6	8.0
Bus. Org.	2.6	5.5	6.2	9.1	11.7	9.4	11.2	12.3	23.5	8.5
Home Ec. S&S	1.8	3.6	4.1	7.3	10.6	9.4	12.5	13.5	28.1	9.1
History	5.0	4.8	4.8	7.1	10.2	7.7	9.7	12.3	27.3	11.2
German	5.7	7.7	9.1	9.9	10.5	11.3	11.5	10.3	21.2	2.8
Art	1.1	2.8	4.1	7.2	9.7	11.9	12.9	14.0	31.0	5.4
Accounting	5.0	8.9	10.2	10.8	11.3	9.4	9.0	8.2	18.4	8.8

Note: Mathematics, English and Irish are excluded from the table above as they are not optional for the majority of students

REVISED LEAVING CERTIFICATE ACCOUNTING SYLLABUS

The new syllabus applies to both ordinary level and higher level students. Higher level 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, and some syllabus topics are designated higher level only (Department of Education, 1995). Key new topics included in the revised syllabus are: an introduction to the conceptual and regulatory framework of accounting; an appreciation of published accounts; cash flow statements; an introduction to management accounting; cost-volume-profit analysis; product costing and budgeting. The syllabus also includes information technology and computer applications in accounting but the delivery and assessment of this has not yet been finalised. Topics removed from the old syllabus are: partnerships; purchase and sale of a business; issue of shares by instalments; branch accounts; joint ventures; bills of exchange; consignment accounts and sinking funds.¹ This study focuses on higher level students' experiences of the new syllabus and examination. It is the experiences and views of this group that are of particular interest to third level educators.

SAMPLE SELECTION AND QUESTIONNAIRE

A questionnaire was designed to assess students' experiences and views of the new Leaving Certificate accounting programme. The target group consisted of first year students on the BAAF programme at DCUBS in the academic years 1997/98, 1998/99 and 1999/2000. The questionnaire was distributed to each cohort of students at their first meeting with the director of the BAAF, which was held prior to the start of lectures. At this meeting, the purpose of the study was explained to the students and they were reassured that the focus of the study was to identify inferences from the total responses rather than individual responses. The completed questionnaires were collected from the students during registration the following day.

Students who did not sit the Leaving Certificate examination in 1997, 1998 or 1999 were excluded, giving a potential population of 324 students. A total of 271 usable replies were received giving an 84 per cent response rate. Given such a high response rate, it is unlikely that any systematic biases from non-respondents have occurred. **Table 3** pre-

sents a breakdown of the sample, analysed by the examination year, accounting background and accounting results.

Table 3: Sample by Examination Year, Leaving Certificate Accounting Background and Examination Results

Exam Year	LC Account	No LC Account	Total	LC Accounting Points	
				Mean	Std Dev
1997	76	11	87	84	10.6
1998	79	15	94	83	12.0
1999	83	7	90	83	11.9
<i>Total</i>	238	33	271	83	11.5
	88%	12%			

Eighty-eight per cent of the sample studied accounting at Leaving Certificate and they all took the higher level paper and obtained an average of 83 points from a maximum of 100. This indicates that the sample consists of high achievers in accounting. The absence of low achievers from this study is not considered a serious omission, as the authors believe few of these students specialise in accounting at third level. There are 161 second level schools included in the sample, which is 21 per cent of the total number of second level schools in the country.

COVERAGE OF SYLLABUS

The prior study (Byrne and Willis, 1997) found strong evidence of a narrowing of the syllabus, arising from a tendency to teach with a focus on the examination paper, rather than on the broader syllabus, thus seriously undermining the objectives of the syllabus. The Commission on the Points System (1999, p. 46) reported this as one of the damaging effects attributed to the points system that was brought to their attention during their consultative process.

To gather some evidence on coverage of topics, all topics on the new syllabus were listed on the questionnaire and students were asked to indicate whether their teacher had or had not covered each topic. Students were also asked to identify any topics that they had omitted from their revision for the examination. Details of the average number of topics covered in each of the three years, together with the same information from the prior study, are presented in **Table 4**.

Table 4: Syllabus Coverage (Number of Topics)								
	1999		1998		1997		Prior Study	
	T	S	T	S	T	S	T	S
Mean	25.16	21.48	25.53	21.72	24.20	20.38	20.48	16.62
Std. Dev.	3.9	4.15	3.67	4.65	4.40	5.05	3.62	5.11
Mean %	81.16	69.29	82.35	70.06	78.06	65.74	70.63	57.31
Minimum	16	12	15	10	11	8	11	5
Maximum	31	31	31	31	31	30	29	29

Note: T = Teachers, S = Students

There was an increase in the average number of topics covered by both teachers and students under the new syllabus as compared to the old syllabus. Controlling for the differences in the number of topics, a Mann-Whitney U test showed that this increase was significant at the 1 per cent level. There was no significant difference in the average number of topics covered over each of the three years of the new syllabus. A Wilcoxon signed ranks test was performed to test whether there was a significant difference in the mean number of topics covered by teachers compared to students in their revision. The difference was found to be highly significant for all years.

Students were asked to identify when their teachers finished covering new material during the Leaving Certificate programme. Given the increase in the number of topics being covered by teachers, it was not surprising to find that it is now taking them longer to cover the syllabus. In 1999, 71 per cent of teachers had not covered it by February in the

second year of the Leaving Certificate cycle, compared with 50 per cent in the prior study. In the same year, 31 per cent of teachers did not finish covering new material until the end of the cycle, whereas in the prior study the figure was only 13 per cent.

Table 5 shows the percentage of teachers and students who covered each topic in the three years of the revised syllabus, together with the same information from the prior study. The table lists the topics in descending order of coverage by teachers in 1999. There was a high level of coverage of both the old and new syllabus topics by teachers and students. The topics with the lowest level of coverage are from the new syllabus; they tend to be descriptive and are unlikely to be examined as a full question.

Table 5: Teacher and Student Coverage of Topics on New and Old Syllabus

	1999		1998		1997		Prior Study	
Topic	T%	S%	T%	S%	T%	S%	T%	S%
CVP Analysis	100.0	96.4	97.5	89.9	94.7	85.5		
Cash Flow Stat.	98.8	92.8	96.2	89.9	92.1	86.8		
Club Accounts	97.6	90.4	97.5	89.9	100.0	89.5	96.5	85.3
Publ. Accounts	97.6	92.8	92.4	82.3	97.4	93.4		
Incomp Records	97.6	96.4	100.0	92.4	92.1	84.2	98.8	98.2
Depreciation	95.2	85.5	98.7	92.4	96.1	86.8	97.1	84.7
Tabular Statements	95.2	88.0	93.7	79.7	100.0	92.1	97.6	92.9
Ratio Analysis	95.2	62.7	98.7	81.0	96.1	82.9	95.3	91.8
Limited Cos	94.0	83.1	91.1	79.7	92.1	80.3	87.1	65.9
Control Accounts	94.0	75.9	93.7	69.6	92.1	71.1	92.9	70.6
Bad Debts	91.6	83.1	89.9	81.0	94.7	86.8	94.7	85.9
Manuf. A/cs	91.6	72.3	96.2	77.2	94.7	77.6	62.9	33.5
Revaluations	89.2	72.3	91.1	79.7	93.4	80.3		
Correct'n Errors	89.2	68.7	88.6	64.6	90.8	61.8	95.3	88.2
Service Firms	89.2	74.7	75.9	64.6	52.6	38.2	16.5	14.7
Cash Budgeting	89.2	80.7	84.8	72.2	60.5	50.0		

	1999		1998		1997		Prior Study	
Product Costing	88.0	77.1	97.5	82.3	81.6	75.0		
Sole Traders	86.7	71.1	83.5	69.6	84.2	69.7	78.2	70.0
Bank Rec'n	83.1	62.7	92.4	68.4	89.5	64.5	82.4	57.6
Dept. A/cs	83.1	68.7	87.3	64.6	72.4	48.7	55.9	30.0
Prod'n Budgets	83.1	68.7	81.0	68.4	53.9	43.4		
Acc & Prep	79.5	77.1	84.8	73.4	93.4	88.2	93.5	84.7
Farm Accounts	77.1	60.2	72.2	54.4	51.3	30.3	22.4	12.9
Flexible Budgeting	77.1	65.1	67.1	62.0	40.8	34.2		
Concepts	62.7	45.8	67.9	51.3	75.0	63.2	34.7	31.8
Cost Classification	60.2	61.4	72.2	68.4	72.4	64.5		
Directors Report	54.2	45.8	54.4	44.3	55.3	44.7		
VAT	51.8	48.2	49.4	43.0	53.9	42.1		
Reg. Framework	51.8	38.6	66.7	51.3	67.1	61.8		
Auditors Report	42.7	35.4	44.9	34.6	51.3	44.7		
Wages	33.7	28.9	38.0	34.2	35.5	27.6		
Pur/Sale Business							94.7	78.2
Partnership: Adm							91.2	68.2
Issue of Shares							90.0	68.8
Partnership: Diss.							89.4	67.6
Branch Accounts							88.2	64.7
Partnership: Retire							81.2	63.5
Partnership: Amal.							76.5	57.1
Joint Ventures							41.2	30.0
Partnership: Conv.							40.6	32.9
Bills of Exchange							26.5	23.5
Consignment A/cs							23.5	10.6
Sinking Funds							2.9	2.9

Note: T = Teachers, S = Students

In all three years, only two topics were covered by less than 49 per cent of the teachers compared with eight in the prior study. Three of those eight topics (farm accounts, service firms and accounting concepts) are still on the syllabus and their coverage has increased to over 60 per cent. Service firms and farm accounts have both been examined since the introduction of the new syllabus while the prior study showed that neither had been examined in the previous 13 years.

T-tests were used to identify any significant differences between:

- Coverage of individual topics in the prior study compared to each of the three years of the current study
- Coverage of individual topics over the three years of the current study, and
- Teacher and student coverage of topics.

The results of these tests are reported in **Table 6**.

Comparison of Prior Study to Current Study

Coverage of manufacturing accounts, service firms, departmental accounts, farm accounts and accounting concepts by teachers and students shows an increase in all three years when compared to the prior study. There was a decrease in the coverage of correction of errors by students from the prior study to the current, suggesting that this topic is not popular with students. Topics may not be popular because they are disliked or the perceived payoff is low. The fall in coverage of ratio analysis by students in 1999 may also indicate that this topic is not popular with students. The Department of Education and Science had informed teachers at in-service training that there would be a ratio question on the examination paper in 1997 and 1998, which may account for the continued high level of coverage of this topic by students in both those years.

Table 6: Significant Differences in Coverage of Individual Topics

Topic	Prior Study (96) to Current Study			Current Study			Current Study		
	Teachers		Students	Teachers		Students	Ts to Ss		
	86-88	88-96	96-98	97-98	98-99	97-98	1997	1998	1999
CVP Analysis									
C F Stat									
Club A/cs							2.99		
Publ. A/cs									
Inc. Records				3.25		2.62			
Depreciation									
Tab. Stat			2.67					2.65	
Ratio Analysis		5.10				2.95	2.72	3.85	5.60
Limited Cos		3.13							
Control A/cs							3.47	4.12	3.37
Bad Debts									
Manuf. A/cs	5.98	7.77	7.05	7.35			3.15	3.66	3.34
Reval'n FAs									2.83
Corr'n Errors			3.45	3.99	4.33		4.47	3.72	3.35

Service Firms	16.37	10.62	5.64	10.93	8.28	3.79	3.11	5.49		3.41	4.97			
Cash Bud'g							3.52	4.37		2.91	4.27			
Prod. Costing							3.33						3.28	
Sole Traders														
Bank Rec'n												3.84	3.99	3.04
Dept A/cs	4.85	5.88	2.58	6.26	5.38	2.78					2.61	3.08	3.46	
Prod. Budgets							3.75	4.15		3.24	3.32			
Acc & Prep	2.91							2.64						
Farm A/cs	9.75	8.34	4.40	7.94	6.73	2.97	2.74	3.51		3.13	3.97	2.70		
Flex. Bud'g							3.40	4.98		3.61	4.09			
Concepts	4.35	5.17	6.54		2.91	4.77								
Cost Class.														
Dir. Report														
VAT														
Reg. Frame											3.00			
Audit Report														
Wages														

Note: Z-scores ≥ 2.58 indicating significance at the 1 per cent level are shown.

Changing Coverage during the Current Study

Coverage of service firms, farm accounts, cash budgets, production budgets and flexible budgets by both teachers and students was significantly lower in 1997 than in 1998 and 1999. For the first year of the new syllabus, teachers appear to have decided to concentrate on cost-volume-profit analysis and product costing for the management accounting section of the examination. The increase in the coverage of service firms in 1998 and 1999 may be explained by its reappearance on the 1997 examination paper after an absence of more than 13 years. Likewise, the question may have indicated to teachers that farm accounts, which had not been examined for a similar period, were likely to be examined under the new syllabus.

Comparison of Teachers to Students

A comparison of teacher and student coverage highlights those topics that are not popular with students. For all three years, ratio analysis, control accounts, manufacturing accounts, bank reconciliations and correction of errors are covered by a significantly lower number of students in their revision. There was a significant difference in coverage of departmental accounts in 1997 and 1998. All of these topics were on the old syllabus. There were no significant differences for new syllabus topics, suggesting that students have a preference for the new areas of the syllabus.

ANALYSIS OF EXAMINATION PAPERS

Accounting is assessed through a written, terminal closed-book examination. When the syllabus was revised, changes were made to the duration and structure of the examination paper. The duration of the examination was changed from two and three-quarter hours to three hours. The maximum mark available is still 400. Previously, students could select different combinations of questions, which complied with the instructions but which resulted in their maximum mark being less than 400. With the revised structure, this is no longer possible. The structure of the examination paper is outlined as part of **Table 8**.

The prior study demonstrated that the examination paper was highly repetitive and predictable, motivating teachers to teach to the examination paper. To investigate this further, a review of the examination

papers for the new syllabus, together with the sample paper, was carried out. The examination questions were found to be primarily computational rather than evaluative. **Table 7** shows the topics included on the higher level papers and indicates the total number of times that each topic has appeared over this period and the marks awarded to each topic. There is a greater range of topics now being examined than under the old syllabus. Many of the topics (bad debts, bank reconciliations, accruals and prepayments, directors' report, VAT) that were not examined as a full question were incorporated in other questions. Regulatory framework, auditors' report, accounting concepts, wages and departmental accounts are the only topics that have not yet been examined.

To help gauge the popularity of topics, students were asked in the questionnaire to indicate the questions they had answered on the examination papers. Their responses are reported in **Table 8**. In section A of the paper approximately 50 per cent of the students answered the final accounts question. Among the alternative questions in this section, service firms and farm accounts were answered by less than 16 per cent. This may be due to the relatively low level of coverage of these topics and the fact that they had not been examined in a long time. In section B of the paper students show a strong preference for new syllabus topics. For two of the three years ratio analysis was the most unpopular question, with a particularly low number of students attempting it in 1999. This aversion to ratio analysis was also observed in the declining coverage of the topic. Cost-volume-profit analysis is the most popular management accounting topic with students while budgeting is the least.

**Table 7: Topics on Leaving Certificate Higher Level
Accounting Papers**

Topics	1999	1998	1997	Sample
Final Accounts: Company Sole Trader Manufacturing	120	120	120	120
Ratio Analysis	100	100	100	100
Published Accounts	100		100	100
CVP Analysis	80		80	80
Cash Flow Statements	60	100		60
Tabular Statement	100		60	60
Club Accounts		60		100
Correction of errors		100	60	
Cash Budgeting			80	80
Control Accounts		60		60
Incomplete Records			100	
Production Budgets		80		
Product Costing		80		
Flexible Budgeting	80			
Service Firms			60	
Revaluation of fixed assets		60		
Farm Accounts	60			
Depreciation	60			

Note: Marks available per question out of a total of 400
Shading indicates new topics on the syllabus

**Table 8: Percentage Answering Questions on Leaving Certificate
Higher Level Accounting Papers**

	1999	1998	1997
Section A: Answer either Q.1 (120 marks) or 2 other Qs (2 x 60 marks)			
Q1 Final Accounts: Company Sole Trader Manufacturing	51.8	48.7	52.6
Tabular Statement			47.4
Service Firms			15.8
Correction of Errors			34.2
Revaluation of fixed assets		25.6	
Control Accounts		39.7	
Club Accounts		39.7	
Cash Flow Statements	44.6		
Farm Accounts	10.8		
Depreciation	42.2		
Section B: Answer 2 questions (2 x 100 marks)			
Published Accounts	89.2		81.6
Ratio Analysis	22.0	62.8	47.4
Incomplete Records			68.4
Correction of Errors		57.7	
Cash Flow Statements		80.8	
Tabular Statement	86.7		
Section C: Answer 1 question (80 marks)			
CVP Analysis	84.3		80.3
Cash Budgeting			21.1
Production Budgets		37.7	
Flexible Budgeting	21.7		
Product Costing		59.7	

Note: Shading indicates new topics on the syllabus

The chief examiner's report (Department of Education and Science, 1998) is available for the 1997 examination but not for subsequent years. The average mark awarded in each question was published in the report. The average mark awarded in the final accounts question was 72 per cent, which was the highest in any question. Given its high mark, it is surprising that a greater number of students do not attempt this question. The average mark awarded was at honours grade (≥ 55 per cent) in all questions except the ratio analysis question, where the average mark was 51 per cent. The publication of this information in 1998 probably contributed to students' reluctance to attempt this question in 1999.

PREDICTABILITY OF EXAMINATION PAPER

The prior study (Byrne and Willis, 1997) revealed that 90 per cent of the students rated the Leaving Certificate accounting examination paper as being more predictable than examination papers in other subjects and no student rated the paper as being less predictable. This predictability is likely to promote rote memorisation of information for assessment purposes rather than learning geared towards understanding. This threatens the aims and principles of the Leaving Certificate programme, which emphasise the importance of self-directed learning and independent thought (National Council for Curriculum and Assessment, 1993). As Mulcahy (1981, p. 199) commented:

... it is preposterous that a system of public examinations should threaten to undermine, as the present system appears to, the important educational goals to which post-primary education professes to aspire.

Given the increase in the number of topics being examined under the new syllabus, a change in students' perceptions of the predictability of the accounting paper would be expected. **Table 9** shows that there has been a significant change over the three years. In 1997, 70 per cent of students rated the accounting paper as being more predictable than other papers. This fell sharply in 1998 to 44 per cent and increased slightly in 1999 to 47 per cent. In all years, less than 20 per cent rated the paper as being less predictable than papers in other subjects. Teachers were given reassurances at in-service training that the sample paper would be a good indicator of the first paper. This probably explains the different predictability pattern in 1997 compared with the other two years.

Table 9: Predictability of Accounting Papers Compared to Other Subjects

	1999	1998	1997	Prior Study
More Predictable	47%	44%	70%	90%
No More or No Less Predictable	43%	37%	25%	10%
Less Predictable	10%	19%	5%	—

To gather additional evidence on predictability, students were asked to indicate what their expectations had been on the likelihood of each topic appearing on the examination paper. They indicated their expectations using a five-point Likert scale where 1 = *highly unlikely* and 5 = *highly likely*. Students expected the 1997 paper to strongly resemble the sample paper. All nine topics that were on the sample paper, with the exception of control accounts, had a mean score of 4 or higher. Six of these topics were actually examined. Two of the remaining three topics on the 1997 paper also scored in excess of 4. Service firms, with a mean score of 2.74, was the only topic not expected by the students, and this probably helps explain the low number attempting this question (see **Table 8**). In 1998, only four of the topics on the paper received a mean score in excess of 4, while in 1999 it was down to three. This suggests that the students' ability to predict the paper is diminishing.

The prior study had reported that predictability was not confined to the topics appearing on the paper; a more serious issue was that the style and content of questions was virtually unchanging. A qualitative analysis of the questions on the sample and actual papers reveals that, for many of the topics, this practice continues. The questions on tabular statements, club accounts, correction of errors, control accounts, incomplete records and depreciation show little variation from those asked under the old syllabus. The final accounts question (Q1) is no longer confined to trading companies; sole traders and manufacturing companies have also been examined, but the adjustments are similar. The format of the ratio analysis question has changed quite considerably. Under the old syllabus, students were given a list of figures for a single period and asked to analyse these in isolation. The information is now presented in a different format and students are asked to perform inter-period or inter-company comparisons, or to compare actual to

projected results. For the new areas of the syllabus, there is evidence of slight variation in question content but it is still too early to reach firm conclusions.

CONCLUSIONS AND RECOMMENDATIONS

Prior experience of a subject is identified in the higher education literature as having a significant impact on student learning. Against this background, this study sought to gather evidence on students' experiences of the revised Leaving Certificate accounting syllabus and examination and in so doing provide third level educators with a better understanding of their students. A prior study (Byrne and Willis, 1997) found limited coverage of the old syllabus and a highly predictable examination paper. It noted that the introduction of the new syllabus offered the Department of Education the opportunity to confront these deficiencies. The current study investigated whether these deficiencies have been addressed.

It revealed that there is more comprehensive coverage of the new syllabus and that the new topics are popular with students. While the examination paper is no longer as predictable, as there is greater variety in the topics being examined, a substantial percentage of students still rate it as highly predictable. A qualitative analysis of examination papers indicated that there was little variation in the content of questions on many topics common to both syllabi. This form of assessment encourages students to engage in rote learning and may result in poor conceptual understanding of the subject (Prosser and Trigwell, 1999, p. 4). Hence, while some of the deficiencies discussed in the prior study have been addressed, the promotion of rote learning remains an issue. To address this issue it is critical that the examination is set so as to promote the best possible learning experience for students. This can be accomplished by varying the content of questions and requiring increased analysis and interpretation.

Third level educators and the accountancy profession should be concerned about the continuing decline in the popularity of accounting among second level students. This decline is likely to have an impact on the numbers applying to third level accounting courses and ultimately on the profession's recruitment. The profession must make strenuous efforts to market itself to second level students as a desirable career choice. Furthermore, third level institutions need to ensure that students

who do not take Leaving Certificate accounting are aware that they are eligible to undertake tertiary accounting programmes and encourage them to do so.

NOTES

The Leaving Certificate Accounting syllabus is available from Government Publications Sale Office, Sun Alliance House, Molesworth Street, Dublin 2.

REFERENCES

- Association of Secondary Teachers in Ireland (ASTI) (1997). *ASTI Submission to the Commission on the Points System*, Dublin: ASTI.
- Breen, R. (1986). *Subject Availability and Student Performance in the Senior Cycle of Irish Post-Primary Schools*, Dublin: ESRI.
- Biggs, J.B. (1978). 'Individual and Group Differences in Study Processes', *British Journal of Educational Psychology*, Vol. 48, pp. 266–279.
- Biggs, J.B. (1987). *Student Approaches to Learning and Studying*, Hawthorne, Victoria: Australian Council for Education Research.
- Byrne, M., Flood, B. and Willis, P. (1999). 'Approaches to Learning: Irish Students of Accounting', *The Irish Accounting Review*, Vol. 6, No. 2, pp. 1–29.
- Byrne, M. and Willis, P. (1997). 'An Analysis of Accounting at Second Level', *The Irish Accounting Review*, Vol. 4, No. 1, pp. 1–26.
- Clarke, P. J. (1995). 'Some Determinants of Student Performance in University Accounting Examinations', *The Irish Accounting Review*, Vol. 2, No. 1, pp. 49–68.
- Commission on the Points System (1999). *Final Report and Recommendations*, Dublin: Stationery Office.
- Department of Education (1971–1996). *Statistical Reports*, Dublin: Stationery Office.
- Department of Education (1995). *The Leaving Certificate Accounting Syllabus*, Dublin: Stationery Office.
- Department of Education and Science (1997–1999). *Statistical Reports*, Dublin: Stationery Office.

- Department of Education and Science (1998). *Leaving Certificate Examination, 1997, Accounting, Chief Examiner's Report*, Dublin: Stationery Office.
- Department of Education and Science (1999). *Leaving Certificate Results 1999*. From: <http://www.irlgov.ie/educ/Exams/res99.htm> [accessed 17 January 2000].
- Entwistle, N. and Ramsden, P. (1983). *Understanding Student Learning*, London: Croom Helm.
- Hannan, D. F., Smyth, E., McCullagh, J., O'Leary, R. and McMahon, D. (1996). *Coeducation and Gender Equality*, Dublin: Oak Tree Press.
- Humphreys, E. and Jeffers, J. (1999). *Pointing to the Future: Some Second-Level Students' Perceptions of the Points System*, Dublin: Stationery Office.
- Kellaghan, T. and Dwan, B. (1995). *The 1994 Leaving Certificate Examination: A Review of Results*, Dublin: NCCA.
- Lynch, K., Brannick, T., Clancy, P. and Drudy, S. (1999). *Points and Performance in Higher Education: A Study of the Predictive Validity of the Points System*, Dublin: Stationery Office.
- Martin, M. O. and Hickey, B. L. (1992). *The 1991 Leaving Certificate Examination: A Review of Results*, Dublin: NCCA.
- Marton, F., Hounsell, D. and Entwistle, N. (eds.) (1997). *The Experience of Learning: Implications for Teaching and Studying in Higher Education*, 2nd edn, Edinburgh: Scottish Academic Press.
- Marton, F. and Saljo, R. (1976). 'On Qualitative Differences in Learning: I Outcome and Process', *British Journal of Educational Psychology*, Vol. 46, pp. 4–11.
- Mulcahy, D.G. (1981). *Curriculum and Policy in Irish Post-Primary Education*, Dublin: Institute of Public Administration.
- National Council for Curriculum and Assessment (NCCA) (1993). *Curriculum Assessment Policy Towards the New Century*, Dublin: NCCA.
- Prosser, M. and Trigwell, K. (1999). *Understanding Learning and Teaching: The Experience in Higher Education*, Buckingham: SRHE & Open University Press.
- Prosser, M., Trigwell, K., Hazel, E. and Gallagher, P. (1994). 'Students' Experiences of Teaching and Learning at the Topic Level', *Research and Development in Higher Education*, Vol. 16, pp. 305–310.
- Ramsden, P. (1992). *Learning to Teach in Higher Education*, London: Routledge.