

SECOND LEVEL ACCOUNTING: THE VIEW FROM THE BLACKBOARD

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ABSTRACT

Higher education research highlights the need to understand students' prior learning experiences. In this context, this paper builds on earlier research into leaving certificate accounting by using a questionnaire to elicit teachers' views on the syllabus and examination. An analysis of their responses reveals that over two-thirds believe that there is not enough time available to cover the higher level syllabus, yet most think the topics included are appropriate. The majority believe that the standard of the higher level paper is too high and that it cannot be answered in the available time. They consider that the junior certificate business studies syllabus provides a poor foundation for leaving certificate accounting. A further major issue for the respondents is the difficulty of teaching ordinary and higher level students in the same class. Findings from the current study are compared to the earlier research on students' experiences and reveal differences with respect to the level of work effort required from students and the predictability of the examination papers.

INTRODUCTION

Effective teaching and learning is dependent upon a complex set of relationships involving teachers, students, the curriculum and assessment. Educational research has demonstrated that students' prior experiences of learning a subject have a significant effect on their subsequent study of the subject (Ramsden, 1992, p. 83; Prosser and Trigwell, 1999, p. 26–57). As many Irish third level students have studied accounting as part of the leaving certificate programme (LCP), it is important that third level educators gain an insight into the second level accounting environment. This paper focuses on teachers' views of leaving certificate accounting (LCA) and, in so doing, builds on earlier research which centered on students' experiences of the subject (Byrne and Willis, 1997, 2001). Such research is important in helping accounting educators to understand their students' predispositions, perceptions and behaviour.

The specific objective of the current research is to gather evidence on teachers' experiences and opinions of the LCA syllabus and examination. The paper begins by describing accounting within the LCP and prior research into LCA. It continues with a discussion on sample selection and data collection. The findings are then

presented and analysed and the paper concludes by considering their implications for accounting educators.

LEAVING CERTIFICATE ACCOUNTING

Accounting was first introduced as a separate subject into the LCP in 1969. The syllabus and the structure of the examination paper remained unchanged until 1995 when a new syllabus was introduced, which was first examined in 1997. It is offered at two levels: ordinary and higher. 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).

Prior research

Although students' prior experiences of learning is an important variable in the student learning model, this is an area of research which has been largely neglected by accounting educators. In Ireland, in common with other countries, accounting education research has tended to focus on higher education (Rebele, Stout and Hassell, 1991; Rebele, Apostolou, Buckless, Hassell, Paquette and Stout, 1998a, 1998b; Booth, Luckett and Mladenovic, 1999; Byrne, Flood and Willis, 1999, 2002) and the use of second level results to predict tertiary performance (Mitchell, 1985; Eskew and Faley, 1988; Keef and Hooper, 1991; Clarke, 1995; Koh and Koh, 1999). There are only two published studies on accounting at second level in Ireland, which were undertaken by the current authors, and both of these concentrated on students' experiences of LCA (Byrne and Willis, 1997, 2001). The first of these studies looked at LCA prior to the 1995 revisions to the syllabus and examination papers. It identified serious issues concerning syllabus coverage, assessment and the predictability of examination papers. The second study focused on the revised LCA syllabus and examination papers and while it found improved syllabus coverage, there were still concerns relating to assessment and the predictability of the examination papers. A forthcoming study explores teachers' views of the reasons for the decline in the subject's popularity over the last decade (Byrne and Willis). A poor foundation provided by junior certificate business studies (JCBS), perceived difficulty in obtaining high grades, volume of material to be covered and the active promotion of other subjects are identified as the main reasons contributing to the fall in numbers taking LCA.

This study gives teachers the opportunity to express their views on the current accounting syllabus and examination papers. Such opportunities are uncommon for most teachers (Van Rooy, 2000). This is surprising, as teachers have a pervasive and powerful influence on student learning. The current study is based on the premise that teachers' views of the syllabus and examination papers are likely to impact on their teaching and this in turn affects students' learning. Focusing on teachers is also justified as they are seen as expert practitioners, whose contributions are valued for their clear, rational, considered and logical perspective (Van Rooy, 2000). They can also influence the future direction and style of

examination papers by lobbying their teaching associations and commenting in the media.

SAMPLE SELECTION AND DATA COLLECTION

A questionnaire, consisting of closed and open questions, was designed to assess teachers' experiences and views of the LCA programme. In January 2001, accounting teachers were invited to attend a seminar in Dublin City University. At this time teachers had six and four years' experience of the revised syllabus and examination papers respectively. Of the 743 teachers invited, 193 accepted the invitation and approximately 150 attended. During the morning the teachers were invited to complete the questionnaire and they spent approximately 20 minutes doing so. There had been no discussion of the issues included in the questionnaire prior to their completing it. A total of 138 usable replies were received, yielding a response rate in excess of 90 per cent. This method of data collection may have resulted in the sample mainly consisting of highly motivated teachers whose views may not be wholly representative of the overall population, thereby restricting the extent to which general conclusions can be drawn. Unfortunately, it was not feasible to compare the profile of the sample with the overall population profile, as details of the population are not available from the Department of Education and Science. As a mail survey was likely to yield a very low response rate, it was felt that the approach taken was appropriate and would provide sufficient data to permit meaningful analysis.

Teacher/class profile

The profile of the respondents may be seen in **Table 1**. They were asked to state how long it had been since they completed their primary degree and to give details of their qualifications. The mean number of years since they obtained their first qualification is 22.4 years, indicating that this is a very experienced group of teachers. Ninety-three per cent of them hold a business degree and five per cent have a masters qualification. The respondents teach a wide range of subjects with all of them teaching at least one other subject. Ninety-four per cent teach business

TABLE 1: RESPONDENTS' PROFILE

Mean number of years since first degree	22.4 years
Hold a business degree	93%
Hold a non business degree	7%
Hold a masters degree	5%
Teach other subjects as well as accounting	100%
Teach business at JC, LC or both levels	94%
Teach mathematics at JC, LC or both levels	36%
Teach computing	19%
Teach economics	9%

and 36 per cent teach mathematics at leaving certificate, junior certificate or both levels. Nineteen per cent teach computing, a non-examination subject, while just nine per cent teach economics.

The number of accounting classes per week and the total amount of class time available varies between schools. While the time available ranges from 140 to 280 minutes, the mean is 194 minutes and the mode 200. The most common pattern is five classes per week, typically of 40 minutes' duration, and 19 per cent report having at least one double class. Ninety-two per cent teach classes that include students studying at both higher and ordinary level. The difficulty of this was specifically mentioned by 13 of the 65 teachers who volunteered additional comments. Respondent 7 said "there is such a big gap between honours and pass, it is very difficult to teach both in the one class". Respondent 139 echoed those feelings: "trying to give time to both levels in one class is almost impossible". The average leaving certificate class size in 1999/2000 was 20.5 pupils. For LCA the average was 17.7 with 57.7 per cent of classes having fewer than 20 pupils (Department of Education and Science, 2001a). The trend of teaching both levels of students in the one class is likely to continue, given the below average class size and the continuing decline in the numbers opting for the subject.

As it is the experiences of higher level students that are of particular interest to third level educators, the discussion on the syllabus and examination papers which follows concentrates on the teachers' views of the higher level course.

Syllabus

Having sufficient time to cover a curriculum adequately is seen as a precondition of good learning (Chambers, 1992), while an overloaded syllabus leads to poor quality learning (Ramsden, 1992, p. 71). Prior research has shown that when courses are saturated with content and are over-demanding on students' time, this leaves little space for the development of higher order thinking skills and results in students having sketchy and confused knowledge of the course content (Ramsden, 1992, p. 137–138).

In the prior study on the current syllabus, students reported that teachers did not cover all topics (Byrne and Willis, 2001). To confirm this finding, teachers were asked if they cover the full syllabus and whether they believe they have adequate time to do so. While 70 per cent claim to cover all topics on the higher level syllabus, only 30 per cent believe they have sufficient time. Respondents' concerns about the length of the syllabus were also reflected in the written comments received. For example, respondent 86 commented that "as the course is so long we must move from topic to topic very quickly". Despite their concerns with the length of the current syllabus, 92 per cent indicated that they like the syllabus and 88 per cent prefer it to the previous one.

The 28 syllabus topics were listed on the questionnaire and the teachers were asked if each should be included. They answered using a five-point Likert scale anchored with 1 = strongly disagree and 5 = strongly agree. **Table 2** lists the topics and the mean scores in descending order.

TABLE 2: WHETHER TOPIC SHOULD BE INCLUDED ON THE HIGHER LEVEL SYLLABUS

Final Accounts of Limited Companies	4.64
Cash Flow Statements	4.52
Club Accounts	4.40
Budgeting	4.39
Manufacturing Accounts	4.38
Accruals & Prepayments	4.37
Product Costing	4.37
Final Accounts of Sole Traders	4.33
Cost-Volume-Profit Analysis	4.31
Incomplete Records	4.30
Revaluation of Fixed Assets	4.26
Depreciation	4.22
Published Accounts	4.18
Tabular Statements	4.15
Bad Debts	4.13
Final Accounts of Service Firms	4.11
Bank Reconciliation Statements	4.02
Control Accounts	3.97
Correction of Errors	3.89
Value Added Tax	3.83
Interpretation of Accounts	3.80
Departmental Accounts	3.67
Accounting for Wages	3.62
Farm Accounts	3.58
Accounting Concepts	3.16
Accounting Standards	3.14
Auditors	3.12
Directors' Report	2.98

Only four topics, all from the regulatory environment and conceptual framework sections of the syllabus, score less than 3.5. This may appear to contradict the major concerns with the length of the syllabus expressed earlier. However, 76 per cent of the respondents identified topics that they think should be omitted, but there is very little consensus on which topics. The syllabus also includes a section on information technology and computer applications in accounting, but the delivery and assessment of this has not yet been finalised. The activation of this topic will lengthen the course, but, despite this, 47 per cent think it should be compulsory.

The previous syllabus was of similar length, but the repetitive, predictable nature of the examination paper facilitated the exclusion of large sections of it (Byrne and Willis, 1997). There are a greater number of topics examined under the new syllabus, making it more difficult to identify topics to exclude (Byrne and Willis, 2001). It is probable that the teachers would have fewer concerns over the length of the syllabus if the examiner reverted to the previous style of examination paper or if there was greater choice on the paper, as this would allow them to omit sections of the syllabus.

As a related question, teachers were asked whether they believe that their students have to work harder in accounting than in the other optional subjects. Seventy-seven per cent think they do. Their opinions on this matter may impact on the popularity of the subject, particularly if they articulate them to students when advising on subject choice. However, teachers may not be in the best position to evaluate the work effort required, as they do not have detailed knowledge of many of the other subjects. Students' views on this issue may be more valid as they experience a wider range of subjects. As part of the prior research, data was collected on students' opinions as to the work effort required in LCA compared to other optional subjects. Twenty-seven per cent stated that they spent more time studying accounting than their other optional subjects, 38 per cent reported that they spent the same time while 34 per cent said that they spent less time. This suggests that the respondents' perceptions may not reflect reality.

Examination papers

To discover the truth about an educational system you must look into its assessment procedures (Rowntree, 1977, p.1). In fact, one of the most robust findings of higher education research is that assessment is a key driver of student learning (Elton and Laurillard, 1979; Crooks, 1988; Boud, 1990; Biggs, 1996; Jones, 1996). It also has a significant effect on teaching (Hargreaves, 1989). Morgan and Kellaghan (1998, p. 91) contend that 'examination requirements exert a strong influence on what is covered in courses, with the result that curricula get narrowed and the knowledge and skills that are likely to be required to answer examination questions receive most attention'. The Commission on the Points System (1999, p. 46) reported that teaching with a focus on the examination paper was one of the damaging effects attributed to the existing system which was brought to their attention. If this focus is to be avoided, the content of examination questions should be varied and the questions should require increased analysis and interpretation. Unfortunately, it is much easier to set questions that require the recall of factual knowledge or the straightforward application of principles to familiar problems rather than questions that assess understanding and the higher level skills of analysis and evaluation. This is particularly true in those subjects that involve mastering quantitative procedures (Ramsden, 1992, p. 188).

LCA is assessed through a three-hour written, terminal, closed book examination. The paper is divided into three sections. Section A requires students to answer a final accounts question or two out of three other financial accounting questions for a total of 120 marks. Section B requires students to answer two out of three financial accounting questions for a total of 200 marks. It is customary for a number of financial accounting topics to be examined as either a 60 mark question in section A or a 100 mark question in section B. Section C is on management accounting with 80 marks available for answering one question out of two. Fifty-nine per cent of respondents are satisfied with the structure of the paper. However, 44 per cent think that the final accounts question should be compulsory and 62 per cent recommend that their students answer this question. Those who dislike the structure would like to see greater choice, especially in section B, greater clarity as

to which topics will be examined as a 60 or 100 mark question, or an amalgamation of sections A and B. As suggested earlier, greater choice on the paper would facilitate the omission of topics and narrowing of the syllabus.

Sixty-three per cent of respondents believe that the standard of the higher level paper is too high while 37 per cent believe it is just right and no respondent rates the standard as too low. Seventy-one per cent believe that the paper cannot be completed in the time allotted to it. The chief examiner does not share this view (Department of Education and Science, 1998, 2001b). In his report on the 2000 examinations he asserts that there was little evidence of time shortage and that up to 5 per cent of candidates answered more than the required number of questions (Department of Education and Science, 2001b).

The prior studies raised serious concerns over the predictability of the examination papers and identified a tendency to teach with a focus on the examination rather than on the broader syllabus (Byrne and Willis, 1997, 2001). Predictable examination papers are likely to promote rote learning rather than learning for understanding and encourage students to study only what will be assessed. Ramsden (1992, p. 187) acknowledges that assessment sends messages about the standard and amount of work required and those aspects of the syllabus that are important. The current study elicited the teachers' views on the predictability of the examination papers by asking them to assess the predictability using a five-point Likert scale where 1 = very unpredictable and 5 = very predictable. The mean score was 3.01, suggesting that the respondents think the papers are not so predictable. However, 73 per cent of them indicate to their students what they expect will be on the paper and 27 per cent omit topics they believe will not be examined. Their actions contradict their views, but concur with students' opinions. Prior research found that over 50 per cent of students believe LCA examinations are more predictable than examinations in other optional subjects (Byrne and Willis, 2001).

To help gauge the influence of the assessment on teaching, the teachers were asked to specify the extent to which they focused on examination type questions. Three quarters of the respondents reported that over 80 per cent of the questions that they cover are examination style questions, highlighting their tendency to teach to the examination. A review of the most popular text books for the subject also suggests that the main focus is on the examination rather than the syllabus. Most questions in these books are from past papers or are examination style questions. Few, if any, seek to build a progressive understanding and mastery of topics. This concentration on examination papers and questions suggests that the assessment is defining the syllabus.

Junior certificate business studies

Two-thirds of students take business studies as a subject at junior certificate level (Department of Education and Science, 1997–2002). As the JCBS syllabus includes accounting, for the majority of students LCA is not their first exposure to the subject. The JCBS syllabus, which replaced a syllabus called commerce, was introduced in 1989 and first examined in 1992. It seeks an integrated approach to

business education and avoids the old division between business methods and bookkeeping (Department of Education, 1988). There are two examination papers for JCBS. Twenty per cent of the examination consists of 20 short compulsory questions. The majority of the 12 remaining questions integrate material from different sections of the syllabus, only two are exclusively accounting and neither is compulsory. This contrasts with the previous commerce examination, where one of the two examination papers was devoted completely to accounting.

In informal discussions with teachers, concerns with JCBS had arisen, so the questionnaire asked whether the teachers believe it provides a good foundation for LCA and if not, why. As over three quarters of the respondents also teach JCBS their views are particularly relevant. Given the mean length of time since the respondents had qualified, they are also likely to have experienced the commerce syllabus. Two thirds believe that JCBS is not a good foundation. The three main reasons given were: the bookkeeping element of the syllabus can be avoided; there is insufficient time to cover the syllabus adequately; there is too much emphasis on general business topics and not enough bookkeeping. Respondent 2 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". Respondent 36 highlighted one of the reasons why the bookkeeping element of the syllabus is 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 is either very 'brainy', 'swots' or 'crazy'". Other respondents indicated that there is a problem in schools where JCBS is taught by non-business graduates who have insufficient accounting knowledge and hence avoid teaching it. Of the 44 respondents who said JCBS provides a good foundation, 23 qualified their answers, with most referring to the need to ensure that the accounting element is well taught. Respondent 45, while having positive views on JCBS, made the worrying comment that "advice was actually given at a junior certificate in-service 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, respondents are concerned about JCBS and the way it is taught.

Ordinary level

As stated earlier, it is the experiences of higher level students that are of particular interest to third level educators, so the previous discussion concentrated on the higher level course and examination. However, it is interesting to note that teachers have contrasting views on the ordinary level course. Fifty-nine per cent believe they have sufficient time to cover the course. They appear happy with the topics on the syllabus and do not think that ordinary level students should cover the topics that are currently higher level only. They identified only one existing topic, correction of errors, as inappropriate for ordinary level students. Seventy-nine per cent consider that the standard of the ordinary examination paper is just right and 85 per cent believe there is sufficient time to complete the paper. The

main ordinary level issue for teachers is the necessity to teach ordinary and higher level students in a combined class.

CONCLUSIONS

Many Irish students taking third level accounting programmes have studied LCA as part of their second level school curriculum. As these students' prior experiences of learning accounting influence their subsequent approaches to studying the subject, it is important that tertiary accounting educators gain an understanding of the second level accounting environment. To help develop this understanding, this study gathered evidence on second level teachers' views of the LCA syllabus and examination papers. The analysis reveals that over two-thirds of the respondents believe that the time available to cover the higher level syllabus is insufficient; however, there is no agreement as to which topics should be omitted. The standard of the higher level course is considered too high and the majority of respondents believe the examination paper cannot be answered in the allotted time. There is evidence suggesting that the respondents teach with a focus on the examination papers. Respondents highlighted their difficulty in teaching both higher and ordinary students in the one class. They also expressed serious concerns about the poor foundation provided by JCBS. This is particularly worrying, as JCBS is likely to play a role in the formation of students' interest in and attitude to LCA. The issues raised in this study suggest that second level teachers may be encouraged to promote rote learning among their students. This is likely to result in students developing a poor understanding of the fundamental concepts underlying the subject, thereby creating a challenge for accounting academics.

There is a need to explore both quantitatively and qualitatively how second level teachers approach the teaching of accounting. Research on the extent to which LCA has developed students' understanding of the key concepts in accounting is also required. Additionally, given the likely influence of JCBS on LCA, studies should be conducted into JCBS. These studies, together with the existing research, will offer third level accounting educators a greater insight into the second level accounting environment, thereby providing them with a better understanding of their students' prior experiences.

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