The Irish Accounting Review (2006), Vol. 13, No. 2, 63–73

"SOPHISTERS, ECONOMISTS AND CALCULATORS": PRE-PROFESSIONAL ACCOUNTING EDUCATION IN EIGHTEENTH-CENTURY IRELAND

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ABSTRACT

This paper explores the existence and extent of accounting education in the eighteenth century, specifically in hedge schools. Utilising primary sources, including contemporary diary entries, textbooks and newspapers, it argues that bookkeeping education was a significant element of education in rural Ireland a century before the formation of professional associations. The paper draws on the historical literature to suggest that, given the eighteenth-century context of limited opportunities for land ownership, an expanding population increasingly depended on a mercantile existence. As a quasi-market for education, hedge schools were responding to a societal, economic demand among disenfranchised Catholics.

> Considerate people, before they declare themselves, will observe the use which is made of power; and particularly of so trying a thing as new power in new persons, of whose principles, tempers, and dispositions, they have little or no experience, and in situations where those who appear the most stirring may possibly not be the real movers... The age of chivalry is gone – That of sophisters, economists and calculators, has succeeded. (Edmund Burke, *Reflections on the Revolution in France*, 1790)

INTRODUCTION

"Hedge schools", which were an important part of the fabric of Irish education in the eighteenth century, have been described by Coolahan (1981, p. 9) as 'a wide-ranging, if rather haphazard, system of unofficial schools'. This paper examines the nature and extent of accounting education in hedge schools and explores the reasons why business constituted such an important part of the curriculum of some hedge schools. The paper concludes that the context in which hedge schools existed is an example of an unregulated market setting and, further, indicative of a pre-professional period in both business and education. As such, using hitherto unexplored sources, the paper adds to our understanding of business education in eighteenth-century Ireland and, more generally, sheds light on supply responses to the demands of the time in an unregulated market. While Ó hÓgartaigh and Ó hÓgartaigh (forthcoming) provides an initial outline of the bibliographical

evidence of business education in eighteenth-century Ireland, this paper significantly extends the contextual consideration of this evidence. Further, it positions these findings in the accounting literature, mirroring in particular perceptions of accounting as an instrument of power and progression.

The paper is in three main parts. The first section traces the educational context of eighteenth-century Ireland and introduces the hedge school as an educational setting. The next section draws on a range of sources to suggest that bookkeeping and business education was an important element of the curriculum in hedge schools. The third section links the broad context set out in the first section of the paper to the micro-economy of the hedge school to suggest that the accounting content of the hedge school curriculum - while under-explored - is hardly surprising, given that the hedge school system constituted a market. Essentially, hedge schoolmasters were responding to market needs. The paper concludes with a brief discussion of the wider implications of the research findings by suggesting that the existence of accounting education in hedge schools was a Foucauldian phenomenon, part of a 'society of control' in which 'mechanisms of command become ever more "democratic", ever more immanent to the social field' (Hardt and Negri, 2000, p. 23).

THE EDUCATIONAL CONTEXT OF EIGHTEENTH-CENTURY IRELAND

Eighteenth-century Ireland was a profoundly hierarchical society. The middle class, whether Protestant or Catholic, was quite small, though it was expanding. Land was a signifier of political and economic power and most land was in Protestant hands after the 1690s and the imposition of the Penal Laws thereafter. However, Catholic merchants developed political and economic links with Continental Europe. Wall (1989), Whelan (1991) and Ó hÓgartaigh (1998) have referred to the rise in Catholic confidence in the eighteenth century, despite the political and economic restrictions of the Penal Laws. It related, in part, to the increased economic power enjoyed by Catholics. They were heavily involved in trade and the army both at home and on the Continent. These connections were developed primarily because Catholics were denied opportunities in the professions. Hence, they sought to cater for their sons and, occasionally, their daughters, through establishing commercial contacts with Catholic families on the Continent. A prime example of this kind of activity is the Hennessy family from Cork in the south of Ireland. They became powerful in the French brandy trade. In Ireland, however, they would have endured limited opportunities. In order to prepare for a commercial career, it was essential to be educated. The Hennessys were educated in a Cork hedge school[1].

Penal laws in the seventeenth and early eighteenth centuries forbade Roman Catholic schoolmasters from teaching and, consequently, they were forced into a peripatetic existence, teaching in secret out of doors, often out of sight behind hedges. When enforcement of such laws was relaxed in the late eighteenth century, "hedge schools" were also held in barns, huts or similar buildings. The *Report of the Commissioners of Irish Education Inquiry* in 1824 found that a total of 560,549 children

attended 11,823 places of education. This represented approximately 40 per cent of children of a school-going age. The overwhelming majority of these - 394,732 or about 70 per cent of children at school - attended 9,352 hedge schools (Daly, 1979, p. 151). Hence, they were an important form of education in the Irish countryside - and a 'vital agent of cultural survival' (Coolahan, 1981, p. 9) - until the formation of the more formal national school system in 1831 (Daly, 1979)[2].

Hedge schools - which Lyons (2004, p. 2) more correctly characterised as 'pay schools' - were common in Ireland from the seventeenth century. Dowling (1968, pp. 41–42) claims that the number of hedge schools 'increased very rapidly during the latter half of the 18th Century... and it was to these that the education of the great bulk of the population was entrusted'. Hedge schools were not part of a formalised, official infrastructure of education: 'they emerged organically to serve the needs of the Catholic and dissenting persuasions' (Lyons, 2003, p. 2). As a consequence, hedge schools were perceived with official suspicion, as places of immorality and sedition (Logan, 1990; Lyons, 2003): their ideology did not sit well with the increasing perceptions of education as an instrument of socialisation and politicisation, with schools as locales for the inculcation of social norms (Cullen, 1990a).

McManus (2002, pp. 133–4) suggests that the hedge schools provided 'a fine education... in reading, writing and bookkeeping, even to the poorest child'. Hedge schoolmasters varied in age, ability and erudition: 'anyone from the highest attainments to the lowest could open a school and hope to attract pupils' (Adams, 1998, p. 109). Dowling (1968), Adams (1998) and McManus (2002) all argue that the hedge school system was relatively sophisticated with a curriculum that was sometimes wide-ranging - including arithmetic, Greek and Latin as well as, in some cases, bookkeeping. There was undoubtedly great variety in the quality and context of hedge schools (Lyons, 2004). However, Daly (1979, p. 151) suggests that the accounts of Dowling and others 'seem excessively eulogistic' as 'many contemporary observers described [hedge schools] as places of squalor and educational anarchy. The truth, no doubt, lies somewhere in between.'

There was an expanding bookkeeping tradition in eighteenth-century Ireland and many Irishmen were exposed to Continental European bookkeeping practices acquired in Spain, France and Italy. 'Apprenticeship abroad in an Irish counting house' was a source of employment for the sons of Catholic families (Cullen, 1990b, p. 78). Wall (1989, p. 80) mentions that, in 1789, Patrick Bellew (of the Bellew gentry family of County Louth) 'sent a son to Rouen to learn French and figures to prepare him for that calling [as a merchant] '.

This mercantile tradition raises a question regarding the significance of business education in general - and bookkeeping in particular - in the educational infrastructure of the time. Craig, Ó hÓgartaigh and Ó hÓgartaigh (2004) suggest that accounting education featured in the formation of several convicts deported from Ireland to colonial New South Wales in the late eighteenth and early nineteenth centuries. This paper explores the extent of business and bookkeeping education in more detail to develop a deeper understanding of the content and context of such education.

Evidence of the business and bookkeeping curriculum in hedge schools may be found in a range of sources, including books and publications of the period, advertisements for schools of the period and in contemporary accounts by visitors to Ireland. The next section draws on each of these in turn to trace a pattern of business and bookkeeping education in eighteenth-century Ireland.

ACCOUNTING EDUCATION IN EIGHTEENTH-CENTURY IRELAND

The hedge school and its books

McManus' (2002) work, *The Irish Hedge School and its Books*, explores the hedge school curriculum through its books and suggests that bookkeeping was an important aspect of the education delivered in hedge schools. McManus (2002) finds evidence in these books that hedge schools offered instruction in (p. 118) 'bookkeeping, surveying and land measuring'. The focus of McManus' work was not on bookkeeping in particular and, hence, this paper adds further detail to her work by using these books as primary evidence of bookkeeping education in eighteenth- century Ireland.

The Irish hedge school system also contained a considerable element of instruction in mathematics (Dowling, 1968; Adams, 1998; McManus, 2002). Dowling (1968, p. 63) suggests that mathematics textbooks of 'great merit were in the hands of a great many [hedge] schoolmasters'. Books stocked by contemporary booksellers included titles on arithmetic by John Gough, Edward Cocker and George Fisher[3] (Adams, 1998, p. 108). The texts by Gough and Cocker in particular appear to have been extensively used and still survive in The National Library of Ireland, along with a text book by Elias Voster.

McManus suggests that 'the most commonly used' was Gough's *Practical Arithmetick both in theory and practice adapted to the Commerce of Ireland as well as Great Britain*, published in Dublin in 1790. John Gough was an Irish Quaker and seems to have written a number of texts in the area (see also, for example, Gough, 1770). The Gough text went to at least five editions, an indication of its popularity, and was also published in Belfast. Gough's text was indeed "practical" and is replete with business and bookkeeping calculations as set out in **Table 1**. It is important to note in this context that the examples given in Gough and the other texts are representations of bookkeeping but not as we know it: they are manifestations of the calculation of bookkeeping entries and do not refer, for example, to double-entry bookkeeping.

The book's content is not only practical but also sophisticated. For example, a set of definitions (p. 207) deals with factoring. Further, a whole section (pp. 235–261) is dedicated to international trade between Dublin and London (p. 35) and between England, Holland and Flanders (p. 239), between England and Hainburgh in Austria (p. 244) and between England and France (p. 246). The latter treatment suggests that these texts were also used in other geographical and economic contexts, including England.

TABLE 1: BUSINESS APPLICATIONS IN GOUGH (1793)

p. 195: Calculations based on goods bought and sold Estimating imports and exports
p. 207: Estimating allowances per cent Definitions including commission as a 'premium allowed by the employer to his factor for transacting business abroad'.
p. 212: Interest calculations
p. 226: Annuities and Pensions
p. 228: Rebate and discount calculations
p. 234: Equation of payments
p. 235: Exchange
p. 239: Exchange between England, Holland and France, including a discussion of rates of exchange
p. 252: Arbitrations of Exchange
p. 258: Invoice for exercise
p. 261: Barter
p. 264: Profit and Loss
p. 267: Calculations of 'profit per cent per annum' at a specific rate
p. 270: Fellowship [partnership] and the division of gain or loss

Edward Cocker's *Arithmetick,* first published on 7 November 1677 (Cocker, 1677), also appears to have been a popular text, having gone to 52 editions. He comments in the introduction that 'as Merchandise is the life of the Wealthy Publick, so Practical Arithmetick is the Soul of Merchandise'. Similar to Gough, Cocker (1677) has a significant focus on business and bookkeeping, including Barter (chapter 27), the calculations of gains and losses (chapter 28) and the Equation of Payments (chapter 29). Voster's 1772 book on arithmetick includes the by-line 'to which is added (never before printed) instructions for bookkeeping' (Voster, 1772). Interestingly, like Gough, Voster was also of Quaker background; he was based in Cork (Meagher, 1994).

Advertising business and bookkeeping education

Craig et al. (2004) begin their exploration of Irish accountants in Australia by exploring the claims of two brothers from Ireland of an ability to teach 'bookkeeping according to the Italian mode'[4]. These advertisements echo similar ones for 'City Academies' in Ireland at about the same time (Dowling, 1968).

A notice in *Finn's Leinster Journal,* dated 2 January 1793, for a Carrick-on-Suir school run by a Mr. O'Brien, stated that

> 'an excellent Mathematician *lives in the House,* who instructs the young Gentlemen in Writing, Arithmetic, Bookkeeping and the Branches requisite for those who may be intended for the Revenue, the Army, the Navy or the University'. (Dowling, 1968, p. 79)

There is also mention by Dowling (1968, p. 114) 'of a town teacher', Philip Fitzgibbon, who taught 'Classics, English Grammar, Geography, the use of the Globes, Bookkeeping, and he is said to have been a good mathematician'.

Advertising in this period took various forms. Corkery (1924, pp. 201–202) reproduces a letter from the poet Eoghan Ruadh Ó Súilleabháin (1748–1784) to the

parish priest of Knocknagree in south-west Ireland, asking him to announce from the altar Ó Súilleabháin's intention to open a school[5]:

Reverend Sir–
Please to publish from the altar of your holy Mass
That I will open school at Knocknagree Cross,
Where the tender babes will be well off,
For it's there I'll teach them their Criss Cross;
Reverend Sir, you will by experience find
All my endeavours to please mankind,
For it's there I will teach them how to read and write;
The Catechism I will explain
To each young nymph and noble swain,
With all young ladies I'll engage
To forward them to with speed and care,
With bookkeeping and mensuration,
Euclid's Elements and Navigation,
With Trigonometry and sound gauging,
And English Grammar with rhyme and reason.

With the grown-up youths I'll first agree
To instruct them well in the Rule of Three;
Such of them as are well able,
The cube root of me will learn,
Such as are of a tractable genius,
With compass and rule I will teach them,
Bills, bonds and informations,
Summons, warrants, supersedes,
Judgment tickets good,
Leases, receipts in full,
And releases, short accounts,
With rhyme and reason,
And sweet love letters for the ladies.

Lyons (2004, p. 10) suggests that the range of subjects offered by Eoghan Rua was quite typical of the time: drawing on Carleton (1824), he suggests that 'this was what was being offered by the general body of hedge school masters, many of whom could be polymaths of renowned erudition.' Quite apart from the actual advertisement itself, the structure of this announcement is also of interest as it suggests that bookkeeping and mensuration were taught to 'young ladies' while more detailed aspects of business at a more advanced stage were being taught to 'the grown-up youths . . . such as are of a tractable genius'. Corkery recounts (1924, p. 202) that 'the school did not last long' as, he speculates, the ex-soldier[6] Ó Súilleabháin, 'had lost the power of working steadily day-by-day'.

Contemporary accounts of hedge schools

Similar to Corkery's reference to the poet Ó Súilleabháin, Adams (1998) cites a contemporary poem by George Dugall (referring to instruction in a nineteenth-

century hedge school) that conjures up images of mathematics with a practical, business bent:

> By loxodromics or dynamics deep,
> I measure land or else I sail [sell] a sheep

Another contemporary account by Carleton (1824, pp. 275–76) comments on schoolmaster, Mr. O'Brien:

> A most excellent teacher, and probably the best book-keeper of the day of the month. Several respectable young fellows used to come from long distances to be instructed by him in the art of keeping accounts.

These observations of individual schoolmasters are also reflected in contemporary recordings of the populace at large. In 1824, the *Report of the Commissioners of Irish Education Inquiry* undertook a survey of education in Ireland. Based on their report, Clifton (1963, p. 18) estimates that there were up to one hundred hedge schools in County Carlow alone in 1824. The Commission recorded that several of these, for example, those of James Tallon at Rathoe and James Lyons of Ballontraine, taught 'reading, writing, arithmetic, **bookkeeping**, mensuration, surveying, dealing, geometry, trigonometry and English grammar' (emphasis added).

Glassford, an English visitor to Ireland at the time states that, contrary to most stereotypes of the Irish, 'arithmetic is a favourite branch of instruction of the Irish people generally' and that arithmetic is 'the Irishman's hobby' (*Tours of Ireland*, p. 2, p. 60). In 1808, Richard Lowell Edgeworth wrote to Lord Selkirk (as cited in Dowling, 1968): 'the higher parts of Arithmetic are better understood and more expertly practised by boys without shoes and stockings than by young gentlemen riding home on horseback or in coaches'. In 1850, Sir Thomas Wyse, in a letter to the Bishop of Kildare and Leighlin, enthusiastically asserted that 'the lower class (in Ireland) proportionally to their position, are better educated than middle and upper'.

The pragmatic purpose of the hedge schools – along with further evidence of their curriculum – is commented on by John Howard (1792, p. 119), the prison reformer:

> The lower class of people in Ireland are by no means adverse to the improvement of their children. At the cabins on the roadside I saw several school[s], in which, for the payment of 3s and 3d Irish per quarter, children were instructed in reading, writing and **accounts** [emphasis added].

Another contemporary account indicates that

> in the common catholic schools [hedge schools], arithmetic and geometry were carried to some length... the inducement to study these seems to be the practical application of them in measuring land. (Bicheno, 1830)

It is in this 'practical application' that the study of bookkeeping and business more generally finds its explanation: hedge schoolmasters were responding to the needs of the age and as such are an interesting market setting in an unregulated context.

HEDGE SCHOOLS AS UNREGULATED MARKETS

McManus (2002, p. 118, citing Brenan, 1935) claims that

> the livelihood of a hedge schoolmaster was largely dependent on his mathematical expertise as "the ordinary people of Ireland would set no store by a school in which arithmetic did not figure prominently".

Hedge schoolmasters, who depended on the demand for their services, became responsive to an increasingly mercantile class of Irish Catholics. McManus (2002, p. 127) claims that

> Irish parents had three main ambitions which they held in prospect for their sons, and these were that they would become either a "priest, a clerk, or a schoolmaster".

As mentioned earlier, hedge schoolmasters were often peripatetic and travelled the countryside selling their educational services to a population who knew the value of education but rarely had the means to pay for it. Fees were often paid in kind, such as through the provision of accommodation or food. While on the supply side of the market there was no formal curriculum until the advent of the national school system in 1831, on the demand side the needs of the Catholic class were relatively pragmatic. While not able to own land, they worked the land through rent, and the ability to measure land and the fruits of the land was an important skill.

The inability to own land and the changing economic environment also led to an increasing Catholic merchant class. Business acumen was, in that case, an increasingly valuable commodity. The success of the hedge schoolmasters and their ability to earn a livelihood as teachers depended on their ability to respond to market needs. In the case of students aspiring to be priests, market needs were institutionally shaped by the Catholic Church (and included, for example, the study of Latin, the catechism and the classics). However, beyond that, the content of the curriculum was a function of the aspiration to be clerk rather than cleric. This meant that, in the absence of a curriculum set down by the State (as was the case after 1831), an entirely pragmatic approach to the delivery of education demanded the inclusion and – as we have seen – the advertisement of bookkeeping as an important area of study.

Drawing on hitherto unexplored sources, this paper has examined the prototypes of a pre-professional period in business and education history – a period before professional regulation and 'credentialism' (Walker, 1995). Hence, the paper sheds further light on an unregulated era. In a broader, international setting, the evidence outlined is also a lens through which we can better understand the early colonial context of the wider business past, in which business and bookkeeping expertise was established through educational institutions such as hedge schools.

Furthermore, accounting has traditionally been characterised as an instrument of power (Hoskin and Macve, 1986; Loft, 1986; Miller and O'Leary, 1987; Hoskin and Macve, 1988) and part of the 'discourse' of empire (Chua and Poullouas, 1998; Annisette, 2002; Annisette and Neu, 2004). The evidence of bookkeeping education outlined here indicates that the Irish underclass in eighteenth-century Ireland was finding the measure of empire through an imperial instrument such as bookkeeping.

This phenomenon is consistent with Foucauld's description of a 'historical, epochal passage in social forms from a disciplinary society to the society of control' (Hardt and Negri, 2000, p. 23). Through book keeping education, as one example, social control 'becomes interiorized within subjects themselves. It is exercised directly on the hearts and minds of subjects, through information systems and welfare practices' (Balakrishnan, 2003, p. 4). Consistent with contemporary official views of hedge schools as locales of both dissent and ambition, this perspective inverts conventional notions of accounting, characterising it as an instrument of the underclass, a means of entry to the world of the middle-man, the agent and the clerk, a tool of progression rather than of power.

ACKNOWLEDGEMENTS

Thanks to participants at the Irish Accounting and Finance Association Conference (Limerick, 2005), the National Library of Ireland Society (2006) and World Congress of Accounting Historians (Nantes, 2006) and, in particular, Peter Clarke, Louis Cullen, Neal Garnham, Finola Kennedy, Felix Larkin, Tony Lyons, Margaret MacCurtain, Colette O'Daly, Philip O'Regan, Bob Parker and Gary Previts for their advice and encouragement with regard to earlier versions of this paper.

NOTES

1 A member of the Hennessy family wrote from France in the early nineteenth century lamenting that he has forgotten the bookkeeping he learned in County Cork. The hedge school he attended was also attended by Edmund Burke, who later attended the Quaker School at Ballitore, Co. Carlow. We are grateful to Professor Louis Cullen of Trinity College, Dublin for drawing our attention to this comment by Hennessy (source unknown).

2 A formal, national school system was established in Ireland in 1831 partly as a means of political control (Cullen, 1990), partly as a social experiment (Coolahan, 1981); it predates the system introduced by such legislation as the 1870 Education Act in other parts of the United Kingdom of Great Britain and Ireland (Akenson, 1970; Hyland and Milne, 1987; Lyons, 2003).

3 See Karpinski (1935) for a discussion of the "elusive" George Fisher and Wallis (1977) for a discussion of Cocker. For more detail of the authors of early accounting textbooks – including Fisher – see Pryce-Jones and Parker (1984).

4 *The Sydney Gazette*, 6 October 1805.

5 Ó Súilleabháin was a bard in the Irish tradition and is an example of a hedge school master who probably taught through Irish, which was widely spoken in Ireland at the time. Lyons (2004, p. 7) comments that 'in many Kerry hedge schools, the language of instruction was necessarily Irish, as it was the only language the people knew.'

6 The Army was undoubtedly an important locale for the teaching and practice of business methods: a text by Bennet Cuthbertson (1768) *A system for the compleat interior management and economy of a battalion of infantry* was 'widely used' according to Houlding (1981, p. 216). We are grateful to Dr. Neal Garnham of the University of Ulster for this reference.

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