

How well do our introductory accounting text books reflect current accounting practice?

Paul Wells¹

School of Business
Auckland University of Technology
Auckland
New Zealand

13 November 2016

Acknowledgement: The author is grateful to three anonymous reviewers, Rowena Sinclair, Carla Wilkins, Elaine Evans and Suzanne Ogilby for helpful feedback and suggestions made on earlier drafts of this paper.

¹ Corresponding author. Paul Wells, School of Business, Auckland University of Technology, Private Bag 92006, Auckland, New Zealand, Phone: 64 9 9219999 x5750, E-mail: paul.wells@aut.ac.nz.

Abstract

Many researchers have found that accounting education contributes to the narrow and stereotypical perceptions students have of accounting, further supporting claims that the profession may be attracting graduates who lack the required skills and capabilities. This study examines how the preparer focused accounting textbooks adopted by New Zealand Universities might contribute to these perceptions. Given that 2 of the 5 adopted textbooks are adaptations of American textbooks, and one is an American textbook, these findings will have implications for educators and authors beyond New Zealand. This paper provides a call to authors and publishers of these textbooks to acknowledge the wider contribution that accounting makes to society, and to better reflect the influence of technology on the accounting process as currently practised.

Keywords: accounting education, introductory accounting, accounting textbooks

Introduction

The Pathways Commission (2012, p. 86) found that accountants were still perceived as “scorekeepers, monitors or bean counters”. It further noted that the accounting profession had failed to clearly articulate the wider contribution accounting made to society. It has been suggested that students should be introduced to the broader context of the subject at an early stage (Ferguson, Collison, Power, & Stevenson, 2006), and that failure to do so contributes to the maintenance of the status quo. The Pathways Commission (2012, p. 11) has also expressed concern that:

“Students are exposed to technical material in a vocation-focused way that is dis-embodied from the complex real world to which students are bound”

Given that higher educational institutions still rely extensively on textbooks as instructional tools (McFall, 2005), one possible explanation for this lack of understanding of the diverse roles being undertaken by accountants in society might in part be due to neglect by the textbook authors. This claim is supported by The Pathways Commission (2012) who noted that there was a lack of teaching resources to enhance the teaching of accounting in introductory papers, and in particular inform students of the wider role of accountants. These concerns provide the motivation and objective to examine the extent to which the textbooks which have been adopted for the first preparer focused accounting paper offered by New Zealand universities, have embraced the changing role of accountants and operation of modern day accounting systems, and hence reflect current accounting practice. That 3 of the 5 adopted textbooks are either American textbooks or adaptations of American textbooks, these findings will have implications for educators and authors beyond New Zealand. This paper provides a source of reflection for textbook authors and subject designers. In

addition this paper contributes to the debate on introductory accounting course design and the integration of accounting information systems into the traditional accounting course.

This paper examines the calls for curriculum reform, analyses the changing role of accounting and accountants, discusses the relevance of selected texts to current accounting practice and concludes with suggestions for change.

Background

Concerns that the curriculum failed to reflect current accounting practice are not new. Following multiple reviews of the accounting curriculum in the United States of America (USA) dating back to 1986 (Accounting Education Change Commission, 1990; American Accounting Association, 1986; Arthur Andersen et al., 1989; The Pathways Commission, 2012) it was concluded that the accounting curriculum and pedagogy created a perception of accounting as a routine, predictable, and procedural activity. This image it was claimed, failed to acknowledge the extended role of accounting from scorekeeping and audit work to include financial planning, assurance services, strategic, risk, knowledge and change management and management advisory services (Parker, 2001). Underpinning the changing role of accounting have been technological developments which have enabled the production of cost effective information to better facilitate internal decision making. Specific technological developments have included: the increasing capacity and declining cost of digital storage media accompanied with the development of database software to facilitate the efficient and effective storage and retrieval of data; the development of computer networks facilitating the capture of data from, and transmission of information to, multiple locations; and the development of the internet to provide a platform to facilitate the transfer of data and information between entities.

These curriculum concerns led to recommendations from the Accounting Education Change Commission (1992) in the USA, to liberalise the introductory accounting courses to better reflect the aptitudes and skills needed for an ever expanding range of career opportunities in accounting. However, Sundem (1999) found that pedagogy had changed more than content and Albrecht and Sack (2000) found an acute need to integrate information technology into the accounting curriculum at an introductory level. Smith David, MacCracken, and Reckers (2003) claim that this lack of technology integration in the introductory accounting textbooks has been an impediment to changing the scorekeeping focus in the introductory accounting courses. These authors further suggest that publishers are conservative and hence unwilling to accommodate change as it would be costly and success could not be guaranteed. Once possible conclusion which may be drawn from these claims is that there is an unwillingness on the part of instructors to embrace this change.

Studies undertaken in Australia (Mathews, Brown, & Jackson, 1990) and New Zealand (Marrian & Lothian, 1992) concurred with these findings. Attempts to address these curriculum concerns to date have mainly focussed on the need for, and development of, accounting graduate non-technical skills (De Lange, Jackling, & Gut, 2006; Evans, Burritt, & Guthrie, 2010; Hancock et al., 2009; Jackling & Calero, 2006; Kavanagh & Drennan, 2008). Regrettably, little attention has been given to the technical skills required for the changing role of accountants.

In the USA the response to these calls for change remains limited. Most programmes have two introductory accounting courses. One focuses on financial accounting, with a focus on scorekeeping and the other on management accounting both being delivered from a preparer perspective. Such a strategy is unlikely to have a positive

impact on non-accounting majors who take these papers. This also creates the illusion that the two disciplines are quite separate and unrelated.

In Australia, Palm and Bisman (2010) found that the first course in accounting which was designed for accounting and non accounting major students also reflected a procedural bookkeeping and compliance driven bias. They concluded that students attracted to such a course may not be best suited to the demands of current accounting practice.

In New Zealand, universities responded to the calls for change to the introductory curriculum by replacing their introductory full year course with two smaller half year courses. The first of these courses focused on an introduction to accounting from a user perspective for all students who are completing a business degree (including accounting majors) but not necessarily majoring in accounting. While the subsequent introductory accounting course adopted a preparer perspective for students seeking to major in accounting. This typical structure for first and second year courses in New Zealand universities is shown in Figure 1.

Insert Figure 1 about here

Such an approach appears to have been successful in changing the perceptions of business students who studied the first course from a user perspective, as a core component of their business degree (Mladenovic, 2000). However, it would appear that the resulting concentrated focus on scorekeeping in the second of these courses has done little to change the perceptions of prospective accounting graduates.

These findings are of concern, as negative and inaccurate perceptions may contribute to the recruitment of students who lack the necessary skills and abilities required by the accounting profession (Palm & Bisman, 2010). A further consequence of these

concerns is that students with the skills and capabilities most suited to a career in accounting might make alternative career choice decisions.

Palm and Bisman (2010) further found, in their Australian study, that there were deficiencies in the prescribed textbooks and supporting supplementary material in the introductory accounting papers. A similar finding was experienced by the author of this paper in the process of searching for and selecting a new textbook for the introductory preparer-focused accounting paper. This is of concern given that Ferguson, Collison, Power and Stevenson (2006, p. 243) described the textbook as a pervasive instructional device used in accounting education which “has the potential to reinforce cultural homogeneity through the advancement of shared attitudes”.

The Changing Role of Accounting and Accountants

The changing role of accounting and accountants has been affected by:

- **why** accounting practice is undertaken, i.e. the context in which accounting operates.
- **how** accounting data is processed, i.e. the impact of technology on the capture, storage, processing and retrieval of data.
- **what** accounting reports are prepared, i.e. the summarisation of transaction data to produce financial statements and the disaggregation of data to produce information for ad hoc reporting.

The context in which an accounting system operates has been subject to considerable change. The accounting system is now a subset of a much larger information system, and most accounting data is now sourced from other sub-systems where the primary focus is on the capture and storage of data about business processes.

Technological developments have influenced the structure and operation of accounting systems which should be central to the introductory “preparer focussed” accounting course (Albrecht & Sack, 2000). Transaction data is not necessarily captured on paper and is stored electronically in databases. It is further noted that the general ledger is no longer the sole source of data for the production of accounting reports.

Data is no longer summarised in specialist journals and reported in summary form in the general ledger. All original transaction data is stored in its original form in a database and transaction details are listed individually in the general ledger. The resulting ledger account has become merely a report, listing transactions by account. Meanwhile, the posting of data from journals to ledgers, the balancing of ledger accounts and the preparation of a trial balance are no longer pre-requisites to the production of the income statement, balance sheet and cash flow statement. A sound understanding of these developments and their implications are necessary if our students are to comprehend the need for and structure of the audit trail which exists within these systems.

One consequence of these technological developments is the cost-effective production of more detailed management accounting information resulting in the availability of a more diverse range of accounting reports. This claim is supported by the American Accounting Association (AAA) (1966, p. 1) seminal definition stating that accounting is:

“the process of identifying, measuring and communicating economic information to permit informed judgements and decisions by users of the information”.

The publication emphasised that accounting was not merely a process of recording and manipulating economic information, and thus did not seek to limit the scope of accounting. They further concluded that accounting should not:

1. be based solely on transaction data;
2. be limited to the measurement of assets and periodic earnings; and
3. be limited to those entities for which periodic earnings were a primary objective.

Of significance, this definition does not limit the breadth of accounting but instead enables the formation of a more diverse image of accounting which reflects “the breadth of opportunity, challenging and interesting roles and service to society” (The Pathways Commission, 2012, p. 82).

Historically accounting was about summarising financial data and then analysing and interpreting the resultant information. Reporting is no longer economically or technologically constrained by predetermined manual processes. Technology now empowers accountants to, both aggregate data and disaggregate information, establish multiple relationships between data items and specify user-defined time horizons. It is now possible generate reports on any data item from any perspective and to analyse and interpret big data. The implications of these changes are reflected in suggested changes to the curriculum by the profession (PricewaterhouseCoopers, 2015) and the academy (AACSB International, 2014).

The absence of change to the curriculum and the changing role of accounting lead to the following research question:

RQ 1. Have the textbooks adopted for the preparer focused accounting course offered by NZ Universities embraced this changing role of the accountant?

Research Design

A search of the, eight New Zealand (NZ) universities and their bookstore, websites, confirmed that seven of the eight largest universities between them prescribe the five textbooks listed in Table 1 for their introductory “preparer focused” accounting course. The eighth university adopted a hybrid electronic textbook. The findings will have implications beyond New Zealand as 2 of the 5 textbooks are Australasian adaptations of American textbooks and 1 is an American textbook.

Insert Table 1 about here

The textbook review process involved: comparing the structures of the selected textbooks to ascertain the extent to which this was consistent with the definition used at the beginning of the textbook; and analysing the content to ascertain the extent to which the changing role of accounting in terms of context (why) the influence of technology (how), and reporting (what), reflected current accounting practice.

Findings

An analysis of each of the textbooks identified in Table 1 revealed a common structure. The introductory chapters of most textbooks being reviewed commenced with an inclusive definition of accounting consistent with the AAA definition, the next six to eight chapters in each text are devoted to the structure and preparation of the income statement, balance sheet and cash flow statement including the requirements of the financial reporting standards. Strangely located, approximately one third of the way through each book, a chapter is devoted to accounting information systems where it is explained that the accounting process is the same for manual and computerised systems, and this is the reason that manual systems and

related processes have been described. The subsequent focus of this discussion is on how to use accounting software rather than analysing its functionality.

In all instances, the accounting system is represented independently of other systems and it is stated that special journals are used to summarise like transactions. All of the textbooks maintain that one of the primary functions of the general ledger is to collect and store transaction data by account code, and with the exception of two textbooks, represent this information in “T” account form. Accounts receivable, accounts payable and inventory systems are described as sub-ledgers of the general ledger and where data passes from the general ledger to sub-ledgers. These findings are presented in Table 2.

Insert Table 2 about here

Discussion

Our analysis revealed that the textbooks failed to:

1. Acknowledge that the production of financial accounting reports is now a secondary information reporting function and that accounting systems are part of a much larger information system thus affecting how and when data is captured.
2. Demonstrate the influence of technology on the production of accounting information in the capture and processing of data related to all business processes.
3. Demonstrate how technology has enabled entities to produce a greater range and complexity of accounting information thus enabling the application of the AAA definition of accounting.
4. Acknowledge that data passes to the general ledger from sub-ledgers or other sub-systems

The consequences of these omissions is that the textbooks have failed to correctly represent current day accounting practice, or acknowledge the evolving breadth of accounting information produced. These shortcomings are of concern in that they limit how accounting is represented in terms of both the scope and purpose and fail to adequately represent the definition provided at the commencement of the textbook.

This approach contributes to an over-representation of the perceived usefulness of the income statement, balance sheet and cash flow statement, and an under-representation of other accounting information. In addition, the presentation of a fragmented and incomplete view of management accounting marginalises this sub-discipline, and implies that it is subservient to financial accounting further endorsing Johnson and Kaplan's (1987) claims thus contributing to the stereotypical scorekeeping image.

It has been shown that the positive attributes of stereotypes are underestimated and their negative attributes overestimated or vice versa (Park & Judd, 1990). Stereotypes have often been assumed to be overgeneralisations, which imply inaccuracy in the perceived dispersion of group members. That is, members are more or less dispersed around the central tendency of the group than is the case. In this instance students are being exposed to accounting processes which do not reflect current day accounting practice. The mental stimulus resulting from repeated exposure to the preparation of the income statement and balance sheet encourages students to overgeneralise this experience to represent their understanding of accounting, which in turn contributes to their very narrow perception of accounting. It is therefore argued that if the textbook contained a more contextual and broad-based approach to accounting, there would be greater awareness of the diverse contributions accounting makes to society.

While it has been suggested that there are other places in the accounting curriculum to locate these "wider subjects" it has been counter-argued that it is difficult to challenge values which have already been socialised in the introductory courses

(Ferguson, Collison, Power, & Stevenson, 2007). We would further argue that it is pedagogically unsound to say one thing in an introductory course and contradict this in a latter course.

These concerns have already been shared by the academic community and are partially addressed by Ainsworth and Deines (2011). They have addressed the changing role of accounting in terms of the context of accounting by focusing on the capture and reporting of data from business processes thus more fully representing the AAA definition. In addition they integrate financial and management accounting to focus on both external financial reporting internal report to aid management decision making. However, this textbook has done little, to address the impact of technology on the accounting process as called for by Albrecht & Sack (2000) and Smith David, et al., (2003).

In order to assist in the integration of technology into the preparer focused accounting course we suggest that, by making the compulsory introductory information systems course which exists in most undergraduate programmes should be a pre-requisite for this course. This will also enable students to comprehend how accounting systems operate within a larger information systems context. This suggested structure is illustrated in Figure 2.

Insert Figure 2 about here

Reluctance to implement this suggestion might suggest that authors and instructors alike are unaware of how technology has influenced accounting practice.

Conclusion

We have examined the approach taken by the authors of introductory accounting textbooks, and suggest that this in part contributes to the inaccurate perceptions that students have of accounting. To what extent the influence on the textbook is instructor, publisher or author driven is unclear. However, the consistency of

approach among the textbooks would suggest an element of influence by the authors and their publishers. Given that three of the five textbooks adopted are either adaptations of US textbooks or published in the USA, these findings will have implications for educators and authors beyond New Zealand.

Forty-eight years have elapsed since the American Accounting Association (1966) called for a broader and more inclusive definition of accounting. Although most textbooks have adopted variations of this definition, few if any appear to have embraced the inclusiveness of this definition, resulting in a failure to reflect accurately the depth and breadth of current accounting practice. This review found that the continued scorekeeping focus in the textbooks adopted by NZ Universities would do little to inform future accountants of the diverse roles performed by accountants, and may lead to the recruitment of students who lack the required skills and capabilities to successfully contribute to the accounting profession. This may discourage the brightest and best students from selecting an accounting major.

Consistent with the recommendations of The Pathways Commission (2012), this teaching note provides three calls to authors and publishers. The first, to clearly explain the relationship of the accounting system to a much larger information system and to explain how most accounting data is sourced from business processes within the wider information system. The second, is to better reflect the influence of technology on accounting as currently practised, thus providing students with a better understanding of how information can facilitate decision-making. The third, is to emphasise the importance of working with both aggregated information and disaggregated data in the preparation of accounting reports.

These strategies would highlight the problem solving role and de-emphasize the scorekeeping image of accounting thus helping ensure the recruitment of students with the appropriate skills and capabilities for a career in accounting.

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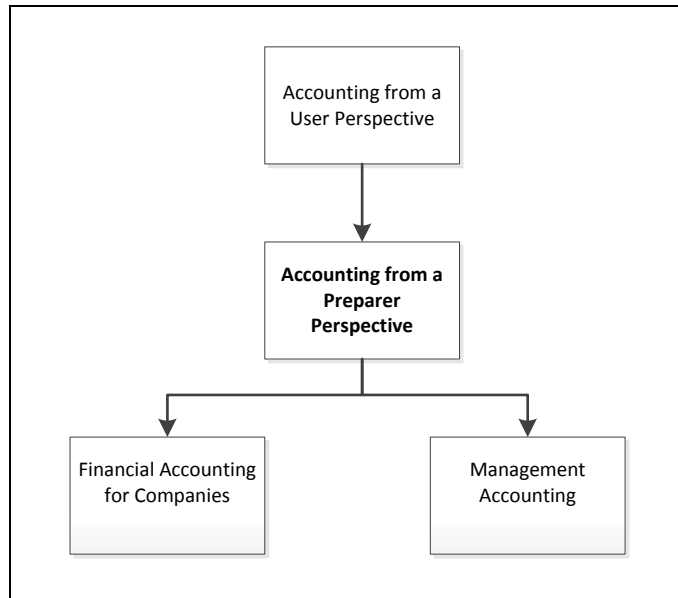


Figure 1: Typical Year One & Two Paper Structure

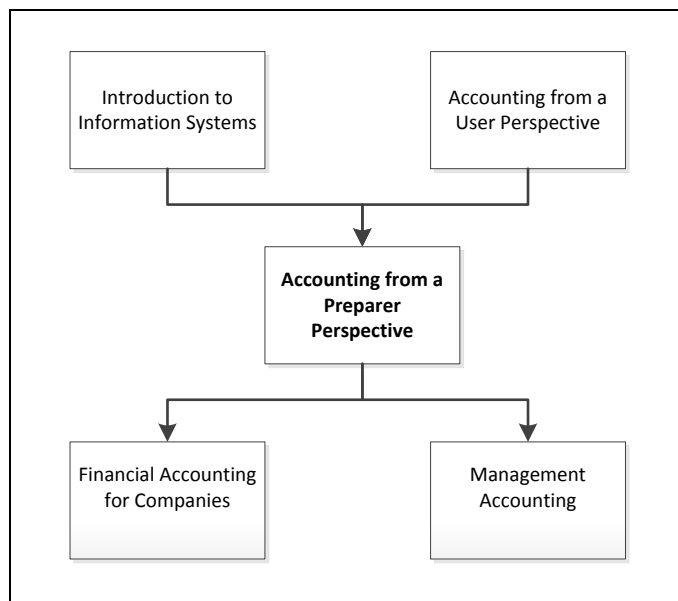


Figure 2: Suggested Year One & Two Paper Structure

Code	Authors	Title	Publisher
LDL	Low M., Davey H., Ling A., Sharma, U. & Cheng A.	Accounting Principles and Practice for New Zealand Students, 2013	Cengage
CMP	Carlton, S., McAlpine- Mladenovic, R., Palm, Mitrione, L., Kirk, N., & Wong, L.	Financial Accounting: Reporting, Analysis and Decision Making. 5th edition 2016	John Wiley & Sons
WMR	Weygandt, J., Mitrione, L., Rankin, M., Chalmers, K.,Kieso, D.E., & Kimmel, P.D.	Principles of Financial Accounting, 3rd edition, 2012	John Wiley & Sons
HHB	Horngren, C., Harrison, W., Oliver, M.S., Best, P., Fraser, D., Tan, and Willett, R.	Accounting, 7th edition, 2013	Pearson
WKK	Weygandt, J.J., Kimmel, P.D. and Kieso, D.E.	Financial Accounting, IFRS edition 2015	John Wiley & Sons

Table 1: Textbooks reviewed

		LDL	CMP	WMR	HHB	WKK
C	Explained how the accounting system was a part of a larger information system	N	N	N	N	N
C	Explored sources of accounting data	N	N	N	N	N
C	Explained the relationship between accounting systems and business processes	N	Y	N	N	N
C	Discussed the scope and depth of information reporting	N	N	N	N	N
C	Provided an inclusive definition of accounting	N	Y	Y	Y	Y
T	Discussed the implications of database technology on data storage and reporting	N	N	N	N	N
P	Described the summarisation of data	Y	Y	Y	Y	Y
P	Discussed the disaggregation of information	N	N	N	N	N
P	Explored the production of ad hoc reports	N	N	N	N	N

Table 2: Review findings