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Assessing the design of accounting modules across UK higher educational institutions

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Abstract

The purpose of this paper is to uncover how accounting modules are designed across UK Higher Educational Institutions. We carried out a content analysis of *Undergraduate Year 1 Accounting Module Handbooks* for a sample of 12 UK Universities. The study finds considerable heterogeneity concerning the way accounting modules are designed and delivered across the UK HE sector. This research contributes to accounting/business education literature as no study has previously utilised a content analysis approach to understand how accounting modules are designed and delivered across UK Higher Educational Institutions.

Key words: content analysis, module handbooks, learning outcomes, Assessment strategies

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Abstract

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Key words: content analysis, module handbooks, learning outcomes, Assessment strategies

1. Introduction and literature review

This study evaluates the learning and teaching strategies outlined within Financial Accounting modules across UK higher educational institutions. To the best of the authors' knowledge, only one study, by Lakshmi (2013), focuses on the design of finance modules across a sample of 10 UK universities. This study therefore contributes to the accounting education literature and we apply a content analysis approach in order to understand how accounting modules are designed and delivered across UK Higher Educational Institutions (HEIs).

There are several activities in the UK Professional Standards Framework¹ (UKPSF), and the first of these relates to the 'design and planning of learning activities and/or programmes of study' (The Higher Education Academy, 2011, p.3). Designing a course with required information bridges the information gap between learners and higher education providers (including the instructor). Biggs (2003) argues that the key components of learning and teaching should be taken into account when designing a module. These components include (a) the curriculum; (b) the learning outcomes; (c) teaching and learning strategies (methods); and (d) assessment approaches in evaluating the learning outcomes. In the UK, The Quality Assurance Agency (QAA) provides guidelines in relation to subject-specific issues to be covered in each subject. The QAA subject-specific benchmark comprises of guidelines, and Higher Education providers in the UK are given discretion to add additional learning outcomes (Quality Assurance Agency, 2016, p.8). QAA (2016, p. 6) guidelines suggest that students can study accounting in combination with both related and unrelated disciplines, such as economics, finance, law, management, computer sciences, and modern languages, perhaps contributing to the popularity of accounting modules across the UK. The International Accounting Education Standards Board (IAEB), which is a leading body in promoting accounting education around the world, considers learning outcomes to be

¹ The UKPSF is national framework for higher education which outlines areas and scope for standardisation and enhancement of teaching and learning excellence within the UK HE sector. More details about the UKPSF can be found on this link: <https://www.heacademy.ac.uk/ukpsf>

‘instrumental’ in creating a pool of highly professional and competent accountants (IAEB, 2016). However, the accounting profession has also been criticised for producing ‘number crunchers’ (Telegraph, 2012). Appropriate module design and delivery could assist in the dissemination of both technical accounting skills as well as softer skills. In a recent comparative study of accounting education in the UK and USA, Ellington (2017) has also called for changes in accounting education by universities and academics.

Research in the area of accounting education shows that HEIs give more emphasis to quantitative skills, compared to soft skills relating to business ethics and corporate social responsibility (Christensen et al. 2007, Cooper et al. 2008; Tricker 2015, Franklin, 2016). Yet, there is evidence to suggest that it might be advantageous for HEIs to place a higher value on some of these softer skills. In the past few decades corporate scandals have been reported,² there has been stock market crashes, financial crises,³ human rights violations within corporations,⁴ incidences of bribery and corruptions⁵, and neglect of business ethics,⁶ all resulting in losses of billions of dollars for investors and society as a whole. According to Forbes Magazine, the biographical details of directors and accountants engaged in major accounting scandals and instances of fraud reveal that these people typically graduated from elite business institutions worldwide. In other words, do HEIs only equip accountants with a mechanistic process to crunch numbers, or are they also more broadly equipped with soft skills and ethics-related education to be applied in real world settings? Accounting educators have been criticised for teaching content which meets only the minimum requirements of professional accounting bodies, so that students in accredited degree programmes (universities) can get a maximum number of exemptions. This, however, is unlikely to equip students satisfactorily in meeting current market requirements (Bayerlein, L. and Timpson, 2017). All of these highlighted concerns demonstrate the importance of ensuring that accounting education within higher educational institutions, is taught to a high standard with properly considered content that is relevant to the modern corporate world.

The UK Higher Education landscape is divided into the public sector, comprised of ‘old’ pre-1992 universities, ‘new’ post-1992 universities, and Russell Group universities, as well as an emerging cluster of independent/private universities (HECSU, 2017). The Russell Group universities and most of the pre-1992 universities are generally known for their intensive focus on research, whilst the others are more teaching oriented. It is argued that the distinction between teaching and research would eventually dissolve, as UK regulatory/funding bodies are likely to implement a Teaching Excellence Framework (TEF), similar to the Research Excellence Framework, which would effectively force institutions to assign equal weighting to teaching and research (Higher Education Funding Council for

² See Tesco profit overstating scandal at: <https://www.theguardian.com/business/live/2014/sep/22/tesco-launches-inquiry-after-overstating-profit-forecasts-by-250m-business-live>

³ Refer to the 2007 financial crisis at: <http://www.investopedia.com/articles/economics/09/subprime-market-2008.asp>

⁴ See Human Rights violations in Sports Direct: <https://www.theguardian.com/commentisfree/2016/jul/25/sports-directs-staff-are-treated-no-better-than-georgian-era-factory-workers>

⁵ Refer to the GlaxoSmithKline bribery Scandal: <http://www.bbc.co.uk/news/business-29274822>

⁶ See the VolksWagen emission scandal at: <http://www.bbc.co.uk/news/business-34324772>

England, 2017). Under the proposed TEF mechanisms, students would be allowed to migrate to other institutions (part way through their studies). This would thus create healthy competition in the Higher Education sector, and institutions would need to develop strategies to ensure they are able to maintain a high TEF score to continue attracting the best students.

The Bloom's Revised Taxonomy⁷ provides useful insights in understanding the level of learning that is achieved from the topics covered in module handbooks (Anderson and Krathwohl 2001), and the knowledge-related skills covered in the learning objectives of accounting modules. This taxonomy would help in understanding whether Higher Education Providers in the UK focus on developing lower order skills (remembering, understanding, and applying) or whether the accounting modules intend to develop higher order skills (analysing, evaluating, and creating). In this regard, the learning outcomes of a module often use verbs that can help the reader in understanding whether the intended learning outcome focuses on higher order skills or lower order skills.

Accounting is a popular subject across UK Higher Educational Institutions, as well as an important and specialised area. This is demonstrable from the statistics of The Universities and Colleges Admissions Service (UCAS) in the UK which reveal that in the academic year 2015, for instance, around 295,430 applicants applied for business education, while around 357,870 applicants applied for medical related subjects (UCAS, 2016). The introductory accounting module examined in the present study is generally offered to all Year 1 business students with a view to equip them with basic understanding of financial accounting, management accounting and finance. In a review article, Watson et al. (2007) suggest 5 key issues that should be considered in accounting education. The five key issues relate to curriculum and instruction, the use of technology in education, assessment methods, faculty issues and students. In a seminal work on accounting education, Simon (1993) carried out a survey of accounting programmes of 38 higher education providers in the UK. The area of emphasis was on course aims and objectives, contents in the syllabus, instructors' perception about the module, the reading list, and the assessment strategies used in these institutions. Simon reports significant differences in the way accounting modules were designed and delivered across the 38 UK Polytechnics and Universities. In a related study, Lakshmi (2013) examined ten finance module handbooks and found that finance modules in the UK did not address cognitive skills, and furthermore, that finance modules are largely process (techniques) driven. In addition, Lakshmi argues that universities in the UK try to fulfil the requirements of professional bodies in order to get exemptions on a maximum number of modules.

The QAA benchmark statement identifies a number of cognitive abilities in the field of accounting, namely: critical evaluation of arguments, independent learning, analysis of data, numeracy skills, using information technology, communicating quantitative and qualitative information, oral and written presentation, and working with colleagues through small group projects (Quality Assurance Agency, 2016, Section 4). The Association of Certified Chartered Accountants (ACCA), a professional accounting body, has also identified a set of

⁷ The Bloom's Revised Taxonomy refers to a model.....

professional skills and attributes required of accounting professionals. These include communication skills, critical thinking, acting ethically, problem solving and exercising professional judgement (ACCA, 2016). Empirical evidence with regard to the perception of accounting students and employers shows that both students and employers prefer analytical/problem solving skills, as well as oral and written communication skills (Kavanagh and Drennan, 2008, p.18). By contrast, a study on the perception of Australian employers in the accounting sector shows that both numeracy and soft skills are considered equally important for recruitment purposes (Jackling and De Lang, 2009).

The QAA benchmark statement and the professional accounting bodies play a significant role in influencing what is to be included in accounting module handbooks, in terms of content and depth of learning. In a recent study of stakeholders' perceptions concerning accounting education in Australia, Howieson et al. (2014) found that stakeholders have unrealistic expectations about higher education and that the corporate world need to understand the financial constraints of HEIs. This implies that there may be a skill gap arising as a result of deficiencies in the current educational system, and this could be addressed through continuous professional development in the workplace. In a study on the perception of students, academics and the corporate sector, Mandilas (2014) reports significant mismatches in the design and delivery of the accounting modules and market expectations. This study therefore proposes that a content analysis of accounting module handbooks in the UK would be advantageous in understanding differences in the content covered across the higher education sector. To fulfil this objective, we compare the learning and teaching strategies for undergraduate accounting modules across HEIs in the UK.

2. Research Methodology

This research employs a thematic content analysis approach (interpretivist paradigm) and a mechanistic (quantitative) content analysis approach in order to understand the differences in the learning and teaching strategies specified in the accounting module handbook of 12 UK HEIs. Quantitative content analysis assigns a numerical score to the underlying text in investigation (Neuendorf, 2002), and is considered useful in comparing differences or variations between two samples. Textual analysis methodology is regularly used by educational researchers in analysing any underlying themes in academic resources (Kim, 2007). The content analysis method is generally defined as 'the systematic, objective, quantitative analysis of message characteristics' (Neuendorf, 2002, p. 1).

In the context of business education, recent empirical studies have utilised a content analysis methodology in evaluating the 'content' in the module handbooks (Rezaee et al., 2006). The Accounting module handbooks for the undergraduate year one module were collected for the twelve HEIs selected for this research project. Content analysis is a process which requires significant time in reading, analysing and coding the underlying text in investigations. This method can offer more robust insights, since a particular question may not be fully explored through survey analysis. A content analysis, on the other hand, is able to capture the underlying themes and as a further advantage the data used for content analysis is then publicly available (Krippendorff, 2004).

Bos and Tarnai (1999, p. 667) suggest there are five steps in carrying out effective content analysis. These steps include: (1) identifying a clear research question; (2) developing categories/themes to be explored; (3) completing an inter-coders reliability test; (4) collecting data and evaluating the text and assigning frequency to different themes found in the text; and, finally (5) the interpretation of results. Following Bos and Tarnai's (1999) approach, the different sections of the module handbooks were thoroughly analysed. In particular, some key areas of emphasis were learning outcomes, learning and teaching strategies, assessment techniques and the contents (subject areas) covered in the module. The frequency of different themes and categories identified in the handbooks were counted for each institution and the findings are reported in tables 1, 2, 3 and 4.

3. Findings

Table 1 sets out the characteristics of the universities selected for this research. 12 module handbooks were collected, representing a larger sample than the 10 utilised by Lakshmi (2013) in her recent research. The sample also gives consideration to a universities' size, and covers both smaller institutions, where the minimum number of students is 8,896 and large institutions, where the number of students is currently 168,215. The total number of credit hours for the sample institutions also varies from 15 to 30 across the sector.

According to the UK QAA, one credit hour requires 10 notional hours of learning (Quality Assurance Agency, 2017). Around half of the sample universities have assessment strategies comprising of both coursework and examination, with one university placing 100 per cent weighting upon examination. Four institutions have split the assessment between examination and a written test, whilst one university has included all three elements in its assessment. This research also considered the number of learning outcomes for each module handbook. Lucas and Milford (2008, p.392) argue that successful module design involves establishing clear aims and learning outcomes and are articulated with the programme learning outcomes. Fitzpatrick and Bryne (2007, p.23) have defined learning outcomes as 'action statements describing what a student is capable of demonstrating in terms of knowledge, understanding, skills and attitudes after completion of a learning activity'. The results of the content analysis of the 12 accounting module handbooks for the sample universities shows that teaching-orientated post-1992 universities, on average, have the highest number of learning outcomes specified in their handbooks, which ranges between 4 and 9, with one university's handbook showing the highest number, with the 25 learning outcomes recorded. There are significant variations across the sector in terms of the credit hours, module learning outcomes and assessment strategies across the sample analysed, and this is summarised in Table 1.

Table 1 Sample Characteristics

Sample No.	Name of HEI	Type of HEI	Number of students/size	Guardian ranking	NSS Score (2016)	Credit hours	Number of learning outcomes	Teaching strategies (number of hours)		Assessment strategy		
								Lectures	Seminars	Exam (%)	Coursework (%)	Test (%)
1.	A	Distance learning	168,215	N/A	89	30	5	13**	12	50	50*	NA
2.	B	Post 1992	30,000	114	84	20	4	20	20	80	20	NA
3.	C	Not-for-profit University	2,500	55	97	15	3	16	8	85	NA	15
4.	D	Pre-1992	17,010	68	86	20	3	30	20	75	NA	25
5.	E	Private University	9000	N/A	75	30	4	15	15	100	NA	NA
6.	F	Pre-1992	18,985	23	90	30	4	44	21	70	10	20
7.	G	Post-1992	17,864	57	86	15	5	0	24	60	40	NA
8.	H	Pre-1992	18,278	18	85	30	25	11	11	50	50	NA
9.	I	Post-1992	32,040	87	83	20	5	12	12	50	50	NA
10.	J	Post-1992	20,635	74	84	24	9	16	16	100	NA	NA
11.	K	Russell Group	8,896	12	75	20	3	20	10	50	50	NA
12.	L	Russell Group	22,000	59	87	15	8	25	10	70	NA	30
Mean			30,452	47	85	22	7	18.5	14.91	70	22.5	30
Maximum			168,215	114	97	30	25	30	24	100	50	50

Source: Developed by the author. * indicates three individual Tutor-Marked Assignments (TMAs). All coursework assignments are individual coursework and the class tests and examinations are closed book (unseen). ** includes 7 hours of online teaching and 6 hours of asynchronous learning. The identity of each Higher Educational Institution is not disclosed. Mean and maximum values are reported in the last two rows.

The content analysis was carried out by exploring the specific learning and teaching related themes (categories) in each module handbook. The specific theme could be related to any area of learning and teaching (for example, learning objectives, assessment criteria). Any new categories and themes emerging from the content analysis were also applied. The categories and themes used in existing literature (see Simon, 1993 and Watson et al. 2007, Lakshmi 2013) were also utilised in analysing the content of the module handbooks. Before starting the content analysis, a pilot study was carried out where two independent readers (2 PhD-level accounting students) were asked to identify those categories in five module handbooks, based on the number of categories already provided and explained to the readers. A statistical test of agreement (called Cohen's Kappa test) for the coding and categorisation carried out by the independent reader and researcher showed that the percentage of agreement (Cohen Kappa test) was 73 percent, indicating a high inter-coders agreement. A high Cohen's Kappa test also indicated that the actual content analysis could be carried out.

The number of learning outcomes for each sample handbook was analysed using the Bloom (1956) Taxonomy methodology. Bloom presented six different stages of complexity in learning tasks, which included knowledge, comprehension, application, analysis, synthesis, and evaluation. These stages were revised to i.e. remembering, understanding, applying, analysing, evaluating and creating (Anderson and Krathwohl, 2001). The revised version considers learning as an outcome of cognitive and knowledge domain. Overall, there were 78 learning outcomes reported, and these are outlined in Table 1. The learning outcomes were further categorised into cognitive skills, and transferable skills, and the results are reported in Table 2. According to Krathwohl (2002) Skill 1 to Skill 3 requires the learner to remember, understand and apply (replicate) the key concepts, whilst stage 4 to stage 6 requires a deeper, higher level of understanding with regard to the subject matter.

Table 2 outlines the summary of skills and knowledge measures identified in the learning objectives of *Year 1 Accounting Module Handbooks*.

Skill	Examples from Learning Objectives	Categorisation
S1	<p>‘<u>Explain</u> basic accounting terms’</p> <p>‘<u>Recording</u> accounting transactions using double entry bookkeeping’</p> <p>‘<u>Prepare</u> basic financial statements’</p> <p>‘<u>Explain</u> the main data sources and source documents used for the preparation of accounting information’</p> <p>‘<u>Explain</u> the benefits of integrated, computer-assisted accounting’.</p> <p>‘<u>Explain</u> the nature and purpose of accounting control system’.</p> <p>‘Prepare a simple income statement and statement of financial position’</p>	Remembering
S2	<p>‘To develop your knowledge and <u>understanding</u> of accounting theory and practice’</p> <p>‘To enable students to acquire knowledge and <u>understanding</u> of accountancy’.</p>	Understanding
S3	<p>‘<u>Apply</u> basic tools and techniques relevant to introductory financial and management accounting’</p> <p>‘Apply fundamental costs concepts to support management planning, control and decision making’.</p> <p>‘Apply control techniques used in financial accounting information’.</p>	Applying
S4	<p>‘<u>Categorise costs</u> appropriately and use the information for short term decision-making purpose’.</p> <p>‘<u>Analyse</u> and interpret financial statements within a range of business contexts’.</p>	Analysing
S5	<p>‘Use basic ratios to <u>assess</u> financial performance’.</p> <p>‘<u>Evaluate</u> own competencies in the context of placement and possible career aspirations’</p>	Evaluating
S6	<p>‘Interpret and <u>critically</u> review theoretical concepts’.</p> <p>‘<u>Independent</u> self-motivated study’.</p> <p>‘Should be able to understand and explore the <u>critical perspectives</u> of accounting’.</p>	Creating

The examples extracted from the sample module handbooks show that S1 uses phrases such as explain, recording, calculating (remembering), S2 focuses on understanding the concepts, S3 focuses on applying those concepts, S4 considers analysing and categorising the financial information, S5 uses phrases such as assessing and evaluating the financial statements, and S6 uses phrases such as independent and critically reviewing the multiple theoretical concepts as well as exploring the relationship between those concepts in understanding and applying accounting concepts. The cognitive abilities and skills identified in the UK QAA Subject Benchmark Statement for Accounting also requires ‘Critical evaluation of arguments and evidence’ (Quality Assurance Agency, 2016, p.9).

Table 3 summarises results for the skills reported in the module handbooks (learning outcomes)

Skill/HE Institutions	A*	B*	C	D	E	F	G!	H	I!	J!	K	L	Total/ Percentage
S1	1	2	1	1	2		4	3		2	1		17 (21.80%)
S2	1			2		4		9		4	1	5	26 (33.33%)
S3	1	1	1		1			6	3	3	1	1	18 (23.07%)
S4	1		1				1	4	1			1	9 (11.53%)
S5	1	1			1			2	1				6 (7.70%)
S6								1				1	2 (2.05%)
Total	5	4	3	3	4	4	5	25	5	9	3	8	78

Note: S1–remembering, S2–Understanding, S3–Applying, S4–Analysing, S5–Evaluating, S6– Creating

* distance learning institution, ! Post-1992 universities

The results in Table 3 show that 21.80% of the learning outcomes of the sample universities fall into the first category of the Bloom’s Revised Taxonomy, which suggests that around a quarter of learning outcomes are related to ‘remembering’ the subject matter (accounting). In addition, S2 and S3 also account for around 23 and 33 per cent of the learning outcomes respectively, implying that ‘understanding’ and ‘applying’ the threshold accounting concepts are considered very important across the higher education sector in the UK. Interestingly, the analysis also reveals that only two learning objectives in the sample of 12 universities consider higher level of learning and require learners to critically engage with the subject matter. Therefore, this study could not find any significant differences across the universities in terms of the aims and objectives of the accounting modules. Category S6 was not observed in the learning objectives. One possible explanation for this may be that the module is offered in year one of the undergraduate degree where the aim is to familiarise students with the basic understanding of key accounting concepts. Another reason could be the ‘mechanistic’ nature of the accounting module where students are required to understand the mechanistic process of preparing the financial statements (see Simon, 1993, Lakshmi 2013). The UKPSF core knowledge dimension K1 ‘The Subject Material’ and the UKQAA’s Benchmark Standards increasingly require learners and HEIs to focus on promoting subject-specific knowledge and awareness.

This research has also identified some interesting themes from the module handbooks of the sample universities. The UKQAA benchmark statement on accounting requires HEIs to consider the requirements sets out by the professional bodies and other regulatory bodies (Quality Assurance Agency, 2017, p.2).

‘To prepare you to qualify as a professional accountant in the qualification framework provided by the Institute of Chartered Accountants for England and Wales (ICAEW)’

(University H)

Two of the module handbooks included a discussion that students will be granted exemption from professional accounting bodies (ICAEW, Association of Certified Chartered

Accountants, Chartered Institute of Management Accountants) upon completion of their accounting module. This demonstrates that higher education providers do attempt to meet internal (institutional) quality requirements as well as the external requirements of the professional bodies.

A final stage in the analysis was to compare the topics being covered in the module handbooks. The QAA's (2017) list of topics were used as a framework in analysing those topics reported in the module handbooks. In categorising and grouping the list of topics, care was taken for treating interchangeable topics in the same group. For example, the topic 'balance sheet' was reported as 'statement of financial position' in some module handbooks, which share the same meaning. The final list of topics reported in table 4 are not homogenous.

Table 4 Key topics covered in the learning outcomes of Universities.

Topics/HE Institutions	A*	B!	C	D	E	F	G!	H	I!	J!	K	L
Accounting concepts	x	x	x	x	x	x		x	x			x
Regulatory environment	x	x		x		x		x	x	x		x
Preparing financial statements	x	x	x	x		x	x	x	x			
Analysis of financial statements			x	x	x		x	x			x	x
Computer-based accounting	x					x						
Recording information	x	x	x	x	x	x	x	x	x	x	x	
Business ethics	x							x				x
Capital markets												x
Accounting for decision making	x				x							x

Note: S1–remembering, S2–Understanding, S3–Applying, S4–Analysing, S5–Evaluating, S6– Creating

* distance learning institution, ! post-1992 universities

With regard to the contents specified in the learning outcomes, the analysis reveals that conventional accounting topics relating to the 'preparation' and 'analysis' of financial statements are covered across the sector. However, as evidenced in Table 2, the existing framework for accounting education seems to encourage 'surface learning' as opposed to in-depth learning, and there is increasing emphasis on the recording and preparation of accounting documents, rather than the application of these statements. Interestingly, pre-1992 universities tend to cover some more innovative and critical areas, such as computer-based accounting, business ethics, and accounting for decision making. Blended learning technologies have proven effective in accounting education, encouraging fairness in assessment (Dickfos et al. 2014). The use of technology in accounting education has continued to spark debate after the earlier work of Garbutt (1980). While the accounting profession requires the use of software's (Hyvonen et al. 2006), and the UKPSF dimension K4 requires 'the use and value of appropriate learning technologies', it is incongruent to observe that accounting software is not taught in the accounting curriculum, with exception of two pre-1992 universities. It is possible that accounting software is covered within the later stages of education, the scope of which is outside of this research project.

The recent financial crisis and reported corporate scandals have raised some questions and concerns with regard to the accounting and auditing professions (Tricker 2015). In the event of any corporate incident, the accounting professionals and wider accounting profession tend to receive blame for inadequately handling or manipulating the financial statements of listed companies.

4. Conclusions

This research provides new empirical insights regarding the content of accounting modules handbooks across the UK higher educational institutions, together with how these compare across a sample of HEIs within the UK. Conducting a content analysis of *12 Undergraduate year 1 Accounting Module Handbooks*, and using the *Bloom's Revised Taxonomy*, this study reveals that the design of accounting handbooks varies significantly across UK HEIs. These differences are primarily related to the number of credit hours, the number of learning outcomes, the number of contact hours for lectures and tutorials as well as assessment strategies. The learning outcomes were coded and categorised across the sample of HEIs studied and the results show that most of the learning outcomes encourage the attainment of lower order skills. The results also show that many institutions (mainly post-1992) have emphasised key accounting concepts, particularly those relating to the preparation and analysis of financial statements. On the other hand, pre-1992 universities have included more topical and innovative issues of accounting learning such as business ethics and business accountability, and the importance of computer-based accounting (accounting software), which are commonly expected skills in the current business environment. Such skills were also found to be important considerations by prospective employers. Recent research on accounting education also suggests an increasing trend in favour of the inclusion of content relating to business ethics, corporate governance and corporate social responsibility (Camilleri, 2016).

5. Implications

This research has implications for accounting academics, higher education providers and policy makers. The findings show that it would be advantageous for accounting academics to incorporate issues relating to decision making, business ethics and social awareness. Additionally, this research uses a content analysis approach in analysing accounting module handbooks, and the application of a text analysis could be considered as a methodological contribution in accounting education research. The study also has implications for HEIs within the UK. Presently, there is a clear lack of emphasis on ethical/decision making elements of accounting, and this is a matter of concern for all stakeholders (including the accounting profession, and the wider industry). Although universities are different in terms of their size, and structure, the regulatory and funding bodies in the UK should set out a requirement that all module handbooks be made publicly available, so that institutions can learn/adapt 'best' teaching and learning practices from across the HE sector. Like many studies, this research has a caveat, as we do not have any data about how many students actually read all the information available in the module handbooks.

6. Future research

The current study focuses on module handbooks for one year. Future studies may look into the module handbooks for a number of years to examine whether the learning objectives, skills and subject-specific topics are updated over time. The cross-sectional nature of this research could not capture such variations. Future studies may also compare the UK accounting module handbooks with the module handbooks in the other Anglo-Saxon countries (USA, Canada, New Zealand, and Australia) to determine whether country-specific characteristics also affect the design of module handbooks.

References

1. ACCA (2016) ACCA Competency Framework. [Online]. Available at <http://competencyframework.accaglobal.com/> (Accessed 22 February 2017)
2. Anderson, L. W. and Krathwohl, D. R. (2001) A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives (New York: Longman).
3. Bayerlein, L. and Timpson, M., (2017). Do accredited undergraduate accounting programmes in Australia meet the needs and expectations of the accounting profession?. *Education+ Training*, Vol.59, No.3, pp. 305-322.
4. Bos, W. and Tarnai, C. (1999), "Content analysis in empirical social research", *International Journal of Educational Research*, Vol. 31, No. 8, pp. 659–71.
5. Biggs, J. (2003). Aligning teaching for constructing learning. Higher Education Academy, pp.1-4.
6. Camilleri, M.A. (2016). Reconceiving corporate social responsibility for business and educational outcomes. *Cogent Business & Management*, 3(1), p.1142044.
7. Christensen, L.J., Peirce, E., Hartman, L.P., Hoffman, W.M. and Carrier, J., (2007). Ethics, CSR, and sustainability education in the Financial Times top 50 global business schools: Baseline data and future research directions. *Journal of Business Ethics*, Vol. 73, No. 4, pp.347-368.
8. Cooper, B.J., Leung, P., Dellaportas, S., Jackling, B. and Wong, G., (2008). Ethics education for accounting students—A toolkit approach. *Accounting Education: An International Journal*, Vol. 17, No. 4, pp.405-430.
9. Dickfos, J., Cameron, C. and Hodgson, C. (2014). Blended learning: making an impact on assessment and self-reflection in accounting education. *Education+ Training*, Vol. 56, No. 2/3, pp.190-207.
10. Ellington, P., 2017. The impediments to the change to UK university accounting education, a comparison to the USA pathways commission. *Accounting Education*, DOI: 10.1080/09639284.2017.1326154
11. Fitzpatrick, J. and Bryne, E. (2007) Do Your Students Know the Learning Outcomes of your Programme? International Symposium for Engineering Education, Dublin, Ireland.
12. Forbes (2016) The Top 10 Accounting scandals of all times. [online]. Available at <https://www.forbes.com/pictures/efik45ekdj/our-take-on-the-10-biggest-frauds-in-recent-u-s-history-2/#7c0daeb5775a> (Accessed on 22 January 2017).

13. Franklin, M., (2016). Student evaluations of teaching in business and accounting courses: A perspective and a suggested improvement. *Cogent Business & Management*, 3(1), p.1226458.
14. Garbutt, D., (1980). Computers in accounting education. *Education+ Training*, Vol. 22, No.7, pp.221-224.
15. HECSU (2017) A New Classification of Higher Education Institutions. [Online]. Available at https://www.hecsu.ac.uk/assets/assets/documents/Futuretrack_Summary_2012_-_A_new_classification_of_HEIs.pdf (Accessed 4 June 2017).
16. Higher Education Funding Council for England (2017). Teaching Excellence Framework. [Online]. Available at <http://www.hefce.ac.uk/lt/tef/> (Accessed 15 January 2017).
17. Howieson, B., Hancock, P., Segal, N., Kavanagh, M., Tempone, I. and Kent, J., (2014). Who should teach what? Australian perceptions of the roles of universities and practice in the education of professional accountants. *Journal of Accounting Education*, Vol. 32 No. 3, pp.259-275.
18. Hyvönen, T., Järvinen, J. and Pellinen, J. (2006). The role of standard software packages in mediating management accounting knowledge. *Qualitative Research in Accounting & Management*, Vol. 3, No. 2, pp.145-160.
19. IAESB (2016). Guidance to Support the Implementation of a Learning Outcomes Approach. [Online]. Available at
20. Jackling, B. and De Lange, P. (2009). Do accounting graduates' skills meet the expectations of employers? A matter of convergence or divergence. *Accounting Education: An International Journal*, Vol. 18, No. 4-5, pp.369-385.
21. Kavanagh, M.H. and Drennan, L., (2008). What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations. *Accounting & Finance*, Vol. 48, No. 2, pp.279-300.
22. Kim, M., (2007). Using systemic functional text analysis for translator education: An illustration with a focus on textual meaning. *The Interpreter and Translator Trainer*, Vol. 1, No. 2, pp.223-246.
23. <http://www.ifac.org/publications-resources/guidance-support-implementation-learning-outcomes-approach> (Accessed 20 February 2017).
24. Krippendorff, K. (2004). Content analysis: An introduction to its methodology. Sage.
25. Lakshmi, G (2013) An Exploratory Study on Cognitive Skills and Topics Focused in Learning Objectives of Finance Modules: A UK Perspective, *Accounting Education*, Vol. 22, No.3, pp. 233-247
26. Lucas, U., and Milford, P., (2008). Key aspects of teaching and learning in accounting, business and management, In Fry, H., Ketteridge, S. and Marshall, S. 2008. A handbook for teaching and learning in higher education: Enhancing academic practice. Routledge.
27. Mandilas, A., Kourtidis, D. and Petasakis, Y., 2014. Accounting curriculum and market needs. *Education+ Training*, Vol. 56, No. 8/9, pp.776-794.
28. Neuendorf, K. A. (2002). The content analysis guidebook. Sage Publications, California.

29. Quality Assurance Agency (2016) Subject Benchmark Statement–Accounting’. [Online]. Available at: <http://www.qaa.ac.uk/en/Publications/Documents/SBS-Accounting-16.pdf> (Accessed February 2017)
30. Quality Assurance Agency (2017) Academic credit in higher education in England -an introduction. [Online] Available at URL: <http://www.qaa.ac.uk/en/Publications/Documents/Academic-credit-in-higher-education-in-England---an-introduction.pdf> (accessed March 2017).
31. Rezaee, Z., Lambert, K.R. and Ken Harmon, W. (2006). Electronic commerce education: Analysis of existing courses. *Accounting Education: An International Journal*, Vol. 15, No. 1, pp.73-88.
32. Simon, J., (1993). UK intermediate financial accounting courses: A survey. *Accounting Education*, Vol. 2, No. 4, pp.253-268.
33. The Higher Education Academy. (2011) ‘The UK Professional Standards Framework for teaching and supporting learning in higher education’. [Online] Available at URL: https://www.heacademy.ac.uk/sites/default/files/downloads/ukpsf_2011_english.pdf (accessed April 2017).
34. Tricker, R. B. (2015). Corporate governance: Principles, policies, and practices. Oxford University Press, USA.
35. Telegraph (2012). Accountants shoulder blame for financial crisis. (Online) <http://www.telegraph.co.uk/finance/newsbysector/banksandfinance/9516047/Accountants-shoulder-blame-for-financial-crisis.html> (Accessed 2 March 2017)
36. Watson, S.F., Apostolou, B., Hassell, J.M. and Webber, S.A. (2007). Accounting education literature review (2003–2005). *Journal of Accounting Education*, Vol. 25, No. 1, pp.1-58.

Public Interest Statement

With the introduction of Teaching Excellence Framework (TEF) in the UK, Higher Educational Institutions (HEIs) are under immense pressure to achieve and maintain excellence in learning and teaching. This paper evaluates the differences in learning and teaching strategies for accounting modules taught in UK HEIs. We employ a content analysis approach to analyse the module handbooks of 12 UK HEIs. Our findings reveal significant variations across the sector in terms of the credit hours, module learning outcomes and assessment strategies for the sample analysed. We conclude by proposing that learners should not only be equipped with a mechanistic know how of accounting, rather HEIs should strive to impart complementary skills such as business ethics, corporate governance and, social and environmental awareness. Presently, there is a lack of emphasis on such elements of accounting, and this is a matter of concern for all stakeholders (including the accounting profession, and the wider industry).

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