

Outcome-based education in accounting

The case of an accountancy degree program in Sri Lanka

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Abstract

Purpose – The purpose of this paper is to discuss the operationalization of the outcome-based education (OBE) model in an accountancy study program in Sri Lanka and the impact of education frameworks on OBE.

Design/methodology/approach – This study follows the case study approach to the first academic accounting study program in a Sri Lankan public sector university. Primary data were collected through semi-structured interviews and secondary data through a content analysis of various relevant documents. The data were analyzed thematically using the theory of constructive alignment.

Findings – In accounting, the most significant imperative for the OBE stems from normative pressures. Since the accounting education frameworks have closely followed the approach suggested in constructive alignment, the normative institutionalization of professional standards in accounting supports OBE in accounting education. The OBE approach with its diverse range of teaching and learning activities and assessment methods in accounting has yielded multi-stakeholder benefits while posing some challenges in operationalization.

Research limitations/implications – The paper's insights are based on a single case study in Sri Lanka and may be difficult to generalize to other countries.

Originality/value – This is the first empirical attempt to study the operationalization of the theory of constructive alignment of OBE in accounting for a study program.

Keywords Sri Lanka, Accounting education, Constructive alignment, Education frameworks, Outcome-based education

Paper type Research paper

1. Introduction

The profound changes in the business environment such as globalization, increasing complexity of business, changing demographic patterns and emerging technologies give a strong signal for the businesses to change (AACSB, 2018a). These factors that ignite changes in the business environment together with the marketization of higher education (Hemsley-Brown and Oplatka, 2006) and diminishing public funds have forced higher education institutes to adapt innovative and entrepreneurial strategies (Zhao and Ferran, 2016; Kimberly and Bouchikhi, 2016). Since business schools are not immune to these changes and face disruption in much the same way as other industries (Zhao and Ferran, 2016), these changes require them to change their education practices to cater to the needs of the business world by providing relevant knowledge, skills and research for the stakeholders they serve



(McHann, 2012). An important change in this direction is the concept of outcome-based education (OBE) that gained significant recognition globally over the last few decades (Gurukkal, 2018; Spady, 1994). OBE reflects a paradigm shift in educational philosophy and practice as it requires specifically identifying the learning outcomes, which indicate the development or growth attained by students on completion of a program of study (Spady, 1994). These intended learning outcomes (ILOs) should guide the curriculum, learning and assessment of the program of study (Spady, 1994). At present, these changes have created widespread interest in the outcomes of educational experiences in business education programs in higher education and a clear tendency for higher education institutes in business to follow global and local educational standards. For instance, there are more than 800 AACSB (2018b) accredited business schools worldwide. These standards have placed greater emphasis on OBE as a means to shift away from the traditional teacher-centered model, where the teacher played the central role in imparting knowledge to students. This demands a change in the curriculum, teaching and learning activities (TLA) and assessment methods of a study program (Spady, 1994; Tam, 2014; Treleaven and Voola, 2008). Despite the importance of OBE in business education, there is clearly a dearth of research on the operationalization of OBE in various disciplines such as accounting and the influence of educational standards on OBE. This paper therefore aims to address the OBE and education frameworks for OBE in an accountancy study program of a public sector university in Sri Lanka. Under this broad theme, it specifically addresses the following two research questions:

RQ1. How and why accounting education has operationalized an OBE model?

RQ2. How the OBE model of accounting education is shaped by academic and professional educational frameworks?

In accounting education, there is wide demand that the curricula of degree programs should focus on core learning outcomes (Pathways Commission on Accounting Higher Education, 2012) owing to the disconnect between accounting education in universities and the demands of the profession, which had been highlighted from the mid-1980s (Bedford *et al.*, 1986; Kullberg *et al.*, 1989; Pathways Commission on Accounting Higher Education, 2012). In accounting education, outcomes are discussed in terms of competencies that accounting graduates of universities need to develop to meet the aspirations of the accounting profession (Lawson *et al.*, 2014, 2015; Pathways Commission on Accounting Higher Education, 2012). These competencies represent what organizations expect accounting professionals to know and are able to do as they move into a variety of organizations performing a wide range of functions (Lawson *et al.*, 2014).

In this context, in order to address the two research questions of the study, the BSc Accounting (Honors) Degree Program offered by the University of Sri Jayewardenepura (USJ), Sri Lanka (refer Section 4 for more details) was selected as the case study. Sri Lanka is an island nation in South Asia with a population of 20m, per capita income of \$4,000 and a literacy rate of 93.1 percent (Department of Census and Statistics, 2017). There is a strong global presence of Sri Lankan accounting professionals (Senaratne and Gunarathne, 2017) and the country is recognized as a global hub of accounting education that produces accountants for many regions including the Middle East, Asia Pacific and Africa (World Bank, 2015; A.T. Kearney, 2012). In Sri Lanka, all university degree programs are required to follow the Sri Lanka Qualification Framework (SLQF), the national qualification framework and the relevant subject benchmark statement (SBS), which adopt an outcome-based approach. Further, as accounting degree programs cater to the accountancy profession, International Education Standards (IESs) of the International Federation of Accountants (IFAC) impact on the design of their ILOs.

The rest of the paper is organized as follows. Section 2 provides the literature review of the study by focusing on OBE in general and the impact of national and international

frameworks on OBE specifically. Section 3 describes the theoretical framework of the study. The next section describes the method followed in the study. Section 5 presents the analysis, followed by discussion in Section 6. The last section provides the conclusions.

2. Literature review

2.1 Outcome-based education (OBE)

The paradigm shift in education toward OBE took time and went through different stages of development such as competence-based education, criterion-referenced learning and mastery learning (Harden, 2002; Parker and Walters, 2008). Further, the trend toward funding, designing and evaluating education based on outcomes gave rise to OBE (Tam, 2014). With these developments there is growing interest in the meaning of outcomes and how they can address the contemporary needs of society (Gurukkal, 2018). Reflecting this interest, several scholars have defined OBE differently. Spady (1994) defines OBE as “clearly focusing and organizing everything in an educational system around what is essential for all students to be able to do successfully at the end of their learning experiences” (p. 12). In similar vein, King and Evans (1991) suggest that outcomes are the end products of the instructional process. Similarly, O’Neil (1994) suggests that OBE is the simple principle that decisions about curriculum and instruction should be driven by the outcomes students should display at the end of their educational experience (p. 6). This shows that OBE clearly deviates from the traditional concept of academics or teachers deciding what to teach and embraces what students can do at the end of a program. Thus, OBE is focused on “what successful graduates should be expected to know or be able to do” (Castillo, 2014, p. 174). Emphasizing the students learning outcomes, Willis and Kissane (1995) state that OBE is “an educational process based on trying to achieve certain specified outcomes in terms of individual student learning” (p. 1). These different but largely similar viewpoints underscore that in business management education, OBE implies that the students acquire the know-how and skills, which are important in real world, practical business situations (McHann, 2012). More specifically, accounting points to the need for accounting graduates to be capable of meeting the demands of the accounting profession upon completion of their degree program. Hence, they should be equipped with professional knowledge, professional skills and professional values, ethics and attitudes (IFAC, 2017) (see Section 2.2 for more details).

While there are various explanations of OBE, Harden (2015) outlines the benefits of OBE for all stakeholders – curriculum developers, teachers, students, professionals and the public. In OBE in Hong Kong, students displayed a great ability to adopt different types of learning approaches most suited to their goals (Pang *et al.*, 2009). Similarly, in the UK, the use of the outcomes as the basis for the criteria for the completion of written work has developed greater student responsibility for learning, made student self-assessment simpler and provided different modes of evaluating learning outcomes (Otter, 1992). Since learning outcomes are a key element in quality assurance and accreditation, OBE supports curriculum renewal as well as revision of professional accreditation standards (Harden, 2015).

Despite the wide availability of OBE-related studies in general, there is a paucity of studies that demonstrate the adoption or implementation of OBE in accounting education. Among these few studies, Lui and Shum (2012) report the steps followed in implementing OBE in a managerial accounting course in Hong Kong. They explain how the learning outcomes were first designed and then TLA were designed to enable students to achieve the desired outcomes. In another study conducted in Malaysia, Yusof *et al.* (2017) highlight how the issue of graduate unemployment provided an impetus for upgrading accounting education targeting a future workforce in financial and business support services. Further, Gunarathne and Alahakoon (2016, 2017) explain how an accounting degree program in Sri Lanka follows novel TLA and assessments such as field studies, practical case study

development, industry-based guest lectures and interactive group-based learning activities to develop transdisciplinary graduate competencies in contemporary accounting courses such as sustainability accounting.

The Ministry of Higher Education in Malaysia adopted the OBE in 2004, after which some notable changes took place in HEIs related to different methods of teaching and learning, assessment strategy, academic staff competency, resources and student support system. The issue of graduate unemployment rates in Malaysia emphasizes the need for upgrading the education of the future workforce in financial and business support services (Yusof *et al.*, 2017). Employers' feedback indicates a lack of adequate skills in graduates, among which are ability to apply knowledge and concepts in the workplace, critical thinking, problem solving and decision making, knowledge of current local and global issues, and communication and language. The challenge for accounting undergraduate programs is that they need to not only cater to employable graduates but also pursue professional certification. Since the implementation of OBE, the majority depend on teaching and learning; different methods of student-centered learning (SCL) have been incorporated in accounting classes: case study and integrated case study, problem-based learning and information technology (IT) application. Other changes such as a minimum of six months of industrial training, use of English as the medium language in teaching and learning and continuous updating of the curriculum to subsume the changes in the accounting environment such as FRS, taxes and accreditation by agencies like Association of Chartered Certified Accountants (ACCA) and Chartered Institute of Management Accountants (CIMA) (Yusof *et al.*, 2017). OBE also gives an opportunity to educators to choose their own approach to teaching rather than a specified approach as long as the students are able to achieve what is expected of them. Further, OBE in accounting ensures that students, at the time of graduation, already have what the accounting industry requires of them (Salin, 2011). Pursuance of OBE in accounting education requires different methods of TLA to be incorporated in accounting classes while continuously updating the curriculum to incorporate the changes in the accounting environment such as financial reporting standards, taxes and accreditation by agencies, ACCA and CIMA and other accounting education frameworks (Yusof *et al.*, 2017). With OBE proving its merits as a pedagogical approach, it has gained prominence in national and international education frameworks, which have further shaped this model.

2.2 National and international frameworks on outcome-based education

National and international education and quality assurance frameworks make an impact on OBE in general. For instance, in South Africa, the South Africa's National Qualification Framework has identified the outcome-based format as the platform for mobility, portability and progression in order to reach the learning achievements (Parker and Walters, 2008). In South Africa, the quality assurance of academic programs is based on total quality management since it benefits employers (Jager and Nieuwenhuis, 2005). Similarly, in the UK, the Quality Assurance Agency has made changes to their methodology of review over the years to focus more on the outcome-based aspect. In Malaysia, the Engineering Accreditation Council requires implementation of OBE as a prime criterion for engineering accreditation. In 2010, OBE was introduced to other disciplines such as science and technology, social sciences and humanities under the Ministry of Higher Education reform policy and Malaysian Quality Assurance of Higher Education (Eng *et al.*, 2012). Similarly, the SLQF was designed in 2012 as the national qualification framework. It led to the establishment of a proper mechanism to evaluate the educational qualifications offered by higher education institutions in Sri Lanka in terms of level of knowledge and attributes of different qualification holders (UGC of Sri Lanka, 2015). SLQF became mandatory in the university system from 2015.

The above overview of the impact of education frameworks on OBE points to the considerable influence accreditation standards can have specifically on business education. Among them, the influence of the AACSB standards merits special attention as business schools around the globe use them to show the quality of their education (Zhao and Ferran, 2016). AACSB (2018a) clearly recognizes the importance of OBE and believes one major factor defining the high quality of a business school is “processes for determining for each degree program, learning goals that are relevant and appropriate, as well as for designing and delivering curricula to maximize the potential for achieving the expected outcomes” (p. 32). In the AACSB Accounting Accreditation, as in its business accreditation, the role of OBE in enhancing the quality of a program is highlighted.

Specifically, in accounting education, the framework published by the IFAC (2017) plays a noteworthy role in providing directions for OBE. The framework considers the objectives of professional accounting education as to develop the professional competence of aspiring professional accountants, and develop and maintain the professional competence of professional accountants through learning and development, which encompasses three components: education, practical experience and training. Professional competence is defined as the ability to perform a role to a defined standard. It is the integration and the application of technical competence; professional skills; and professional values, ethics and attitudes. The IESs, developed under this framework, prescribe the level of proficiency for competence areas to be achieved as learning outcomes as depicted in Table I.

Additionally, the SBS for accounting have an impact on OBE in accounting. A part of the UK Quality Code for Higher Education is SBS (QAA, 2016). It presents the nature of a study program and what is expected of a graduate in a particular subject area. Hence, it provides a reference point for design, delivery and review of academic programs. SBS for accounting was initially published in 2000 and revised in 2007 and 2016 and applies to honors degree programs in accounting. It provides guidance for developing the ILOs in terms of a set of subject-specific knowledge and skills and cognitive abilities and generic skills that a graduate is expected to develop on completion of an accounting degree program. Accordingly, accounting degree programs are required to set TLA and assessment activities appropriate for meeting their aims and desired outcomes. Similarly, an SBS in Accounting has been developed in Sri Lanka in line with that of the UK (QAAC, 2010) to guide the accounting education in the country.

Although OBE is gathering momentum in education in general and accounting education in particular both internationally and locally, accounting educators and researchers still face a problem of adopting, implementing and comprehending OBE in accounting in higher education (Senaratne and Gunarathne, 2019). In this study, we posit the Biggs theory of constructive alignment as a theoretical framework as it provides a theoretical framing by combing how students construct meaning in their learning process and how teachers use an aligned design of teaching and assessment to aid the former (Biggs and Tang, 2011). This theoretical framework is presented in the next section.

Standard	Focus
IES 2	Technical competence ^a
IES 3	Professional skills ^a
IES 4	Professional values, ethics and attitudes ^a
IES 5	Practical experience which develops professional competence
IES 6	Assessment of professional competence

Table I.
IESs relevant to OBE

Note: ^aThese standards highlight the learning outcomes for several competence areas
Source: IFAC (2017)

3. Theoretical framework

According to the current literature, the international trend in higher education is to shift away from a teacher-centered model to a learner-based model focused on what students know and can actually do. This has been adopted increasingly not only in international but also in national qualification frameworks. Thus, the OBE model is consonant with the theory of constructive alignment, which claims that any learning or meaning is constructed by the students in the course of their learning experience (Biggs, 2014; Biggs and Tang, 2011).

The term constructive alignment has two aspects. The first aspect, constructive, refers to the fact that the students construct meaning through relevant learning activities (Biggs, 2003). Thus, meaning is not something that is imparted or transmitted by the teachers to the students. Instead, it should be created by the students themselves. The second aspect, alignment, refers to what the teachers do. This involves setting up the learning environment that supports the learning activities, which are appropriate for achieving the desired learning outcomes (Biggs, 2003). This requires that the components of the teaching system, particularly the teaching methods and assessment tasks, be aligned with the learning activities assumed in the desired learning outcomes of a program/course of study. Thus, constructive alignment is an outcome-based and learner-centered approach to teaching, which involves first designing the learning outcomes that the students are intended to achieve in a program/course of study and then designing the teaching and assessment methods of the program/course, respectively, to achieve the learning outcomes and to assess the standard which the students have achieved.

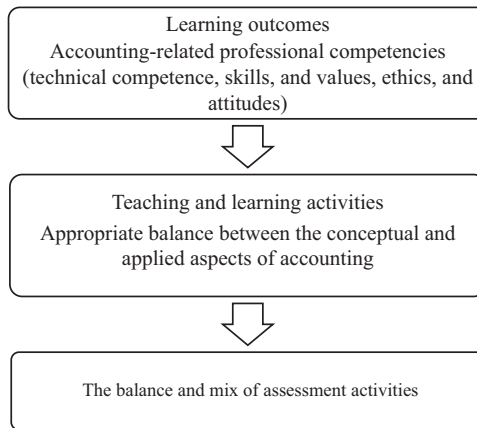
Accordingly, the theory of constructive alignment emphasizes the combination of constructivism and instructional design (Biggs, 1996). Constructivism highlights the importance of student's activities in creating meaning which has an impact on TLA and assessments. Instructional design stresses the need for an alignment between the objectives of a program/course of study and the targets for assessing student performance. Hence, it is important to maintain an agreement between ILOs and TLA and assessments (Tam, 2014). This can also be achieved by tracing the graduate attributes as learning outcomes of a program of study from its design stage, engaging students in diverse learning activities and assessing students' achievement of ILOs using standards-based criteria (Treleaven and Voola, 2008). Hence, this approach emphasizes the need for "learning activities, which lead to the achievement of the desired kind of deep, transformational learning as opposed to a surface involvement with facts and information" (Walsh, 2007, p. 80).

The essential ideas underlying the theory of constructive alignment have been drawn from four questions drawn by Ralph Tyler (1949): What educational purposes should the school seek to attain? What educational experiences can be provided that are likely to attain these purposes? How can these educational experiences be effectively organized? How can we determine whether these purposes are being attained? (Biggs, 2014). Over the years, the concept of constructive alignment has been accepted from the individual teacher level to institutional level and has been incorporated in quality assurance mechanisms of higher educational institutes.

Even in accounting education a similar approach to that of Biggs' (1996, 2014) constructive alignment is advocated in the IFAC (2017) Framework for Education Standards. It requires identifying the competencies required in accounting professionals, learning and development required to instill these competencies and assessment of competencies acquired. The SBS in Accounting too outlines the same approach in accounting (see Figure 1). Hence, accounting education too has become an outcome-based approach, where all components of the teaching system – the curriculum and its intended outcomes, the teaching methods used, and the assessment tasks – are aligned with each other in order to enable the learner to construct meaning through learning activities.

In this context, this study explores this constructive alignment in accounting education focusing on an OBE model adopted in an accounting degree program based on the

Figure 1.
Constructive
alignment in
accounting education



Sources: QAA (2016) and IFAC (2017)

constructive alignment drawn from both SBS in Accounting and IESs as well as of the national qualification framework, which advocates the application of OBE at university level. The way the research questions of the study have been addressed based on this theoretical frame is described in Section 4.

4. Method

In this study, we followed the case study approach to allow for an in-depth analysis of the phenomena (Yin, 2013) – i.e. how and why an OBE model is operationalized in an accounting degree program and how the national and international educational frameworks impact on this process. This method is appropriate for exploring the “how and why” research questions that do not require control over behavioral events, and the relevant people are still accessible and able to recall events accurately to some degree (Crossan and Berdrow, 2003; Yin, 2013).

The selected organization for the study is the Department of Accounting (DA), USJ, Sri Lanka, which was established in 1991 to offer the first accounting degree program in the Sri Lankan university system – BSc Accounting (Honors) Degree Program (referred to as the accounting degree program hereafter). The main reason for the selection of this academic entity is both the significant role played by DA in the accounting education sector in the country and accessibility to rich information sources. The origin of USJ dates back to 1873 and at present it has more than 115,000 students (internal and distance mode), making it the largest university in the country. Currently, USJ has seven faculties and DA comes under the Faculty of Management Studies and Commerce (FMSC), which is currently in the process of obtaining AACSB business accreditation. DA currently offers the accounting degree program, master’s degree (Master’s in Professional Accounting) and some extension courses in computer-based accounting.

The focus of this study is, however, on the bachelor’s degree program, which runs for four years and whose present intake is 200 students per year. Students enrolled in this program follow a common curriculum in management in the first year, which provides the core business knowledge in all functional areas of business. From the second to fourth years, the students follow the accounting specialization courses (both core and electives) along with several related courses in finance and business, internship and research. An important component of the degree program is the two-year compulsory practical training (internship) program, where students work as interns in actual work settings and learn how the theories, concepts and principles learned in the classroom are applied in practice. From its inception

itself, DA has maintained close relations with many organizations in the corporate and public sectors. It has signed several MOUs with some of these organizations such as KPMG, E&Y (international firms of public accountants), HSBC and other leading banking and finance institutions of the country to facilitate the internship program. The graduates of this study program are entitled to substantial exemptions from international professional accounting qualifications such as CIMA (UK), ACCA (UK), Institute of Chartered Accountants in England and Wales (UK) and Certified Practising Accountant (Australia).

This present study is a result of an ongoing research project that explores the accounting education practices in Sri Lanka. After obtaining the relevant ethical clearance for this study from the researcher's university, the data were collected between May 2016 and April 2018 from both primary and secondary sources through interviews, on-site observations of physical facilities and extensive document analyses as a means of triangulation to improve the trustworthiness of the study (Golafshani, 2003; Yin, 2013). The head of department, the founding head of department, four senior lecturers (including two former heads of department) and three junior lecturers were interviewed for between approximately 20–60 min. Six recently passed-out graduates and four final-year students were also interviewed. This resulted in 23 interviews in total (see Table AI for more details). These interviews can be characterized as in-depth and semi-structured and conducted according to the main themes developed based on theoretical model used in the study. Depending on the respondents' answers the order and logic of questioning varied which is a suitable method for conducting studies of this nature (Saunders *et al.*, 2003). The majority of the interviews were voice recorded with the consent of the respondents. They were later transcribed for analysis. In addition to interviews, on-site visits were also made to observe some of the facilities of DA such as the Accounting Resource Centre (around which IT-related activities revolve) and the Skills Development Centre (language laboratory of DA).

We also gathered data by analyzing many documents such as the syllabi of the department (this is a booklet that outlines the detailed syllabus), faculty prospectus, faculty progress reports, quality assurance reports, strategic plan of the department and evaluation reports of the quality assurance. In addition, the websites of the department, and the faculty were also referred to collect data. The data collected from these multiple sources were analyzed thematically based on the theory of constructive alignment, which is incorporated in the OBE model. According to the theory of constructive alignment, in designing a learning experience the focus should be on the learner's activities. Hence, Biggs (2003) advocates a three P's approach – the presage, the process and the product. The presage takes place prior to learning activities and involves consideration of the student's prior knowledge and ability together with the program design in order to address what is intended to be taught, how it is taught and assessed (i.e. ILO and content development); the process is learning-focused activities that the students will undertake (i.e. TLA); and the product is the outcome expected from these activities (i.e. assessment – the means of identifying that the student has learned successfully). The study analyzes the data collected thematically based on these three headings stemming from the theory of constructive alignment to address the two research questions of the study.

The next section presents the data analysis of the study.

5. Analysis

5.1 Operationalization of the OBE model in an accounting degree program

To address the first research question of the study, this section presents the analysis under the three headings drawn from the theory of constructive alignment: presage (ILOs and content development), process (TLA) and product (assessment) under three important periods of OBE development in the DA, i.e. from inception to initial development (1990s to early 2000), period of quality assurance being introduced to the university system

(early 2000 to 2012) and period of increased importance on corporate planning and SLQF becoming mandatory (2012 up to now).

5.1.1 Presage – ILOs and content development of the accounting degree. Period of inception and initial development. When the accounting degree program was introduced in 1991, it focused on training accounting graduates with a professional orientation to meet the aspirations of the accounting profession and the employers. Hence, at the inception, the curriculum of the degree program had the following salient features:

- English as the medium of instruction.
- Two-year compulsory internship program in accounting and finance.
- IT as a core component.
- Business communication skills development.

By incorporating these features, it was envisaged that accounting graduates would possess the attributes that would put them on par with the accounting professionals produced by professional accounting bodies (PABs), who dominated the employment market during this era. Confirming this view, the founder of the degree program said:

When we introduced the degree, we had a challenge to ensure our students can find jobs upon graduation. Because at that time all the accountants were produced by the PABs. So, we had to introduce many features to the degree program which the job market asked from a prospective accountant.

Another imperative for focusing on the expectations of the job market was the high level of unemployment among the graduates during the period. Highlighting this point, the founder further added:

Also, at that time there was a lot of unemployment among the university graduates. We knew most of the problems in them. We were careful that our graduates do not have those weaknesses.

Although these graduate attributes expected by the accounting profession at that time had been introduced to the degree program, there was no formal documentation of ILOs. They were driven mainly by the founders' perception and experience of what the accounting profession expected. During this period, there was also no formal requirement to develop ILOs for a degree program or its courses of study. A few years later, however, the accounting study program had to commence documenting ILOs for courses of study in the curriculum when applying for exemptions for the degree programs from international PABs (initially from CIMA, UK) in the late 1990s to show the alignment of its courses of study with the relevant subjects of CIMA. This process subjected to further developments in the next period.

Period of quality assurance being introduced to the university system. The next major development toward the streamlining of the ILOs occurred with the introduction of the quality assurance mechanism to the university system from the early 2000s. In 2003, DA developed the self-evaluation report (SER) for the degree program in line with the subject-review guidelines of UGC, the apex body of public universities operating in Sri Lanka. The accounting degree program was the first-degree program of FMSC subjected to an external evaluation in this review. At this point, DA documented the ILOs of the degree program for the first time. In recollecting their experience of the SER, one of the senior lecturers said:

When we prepared the SER, we had to develop the ILOs for the degree. We looked at knowledge, skills and attitudes as the focus areas when developing the ILOs.

Accordingly, the ILOs have been developed demarcating them as knowledge-based, skill-based and attitude-based outcomes (DA, 2003).

In subsequent years, DA received a grant under a World Bank funded project, Improving Relevance and Quality of Undergraduate Education (IRQUE). As an activity under this project, DA was able to obtain the services of an international consultant and to review and revise the curriculum following a more formal procedure in the 2008–2009 period. This included a stakeholder engagement process covering students, employers and alumni; SWOT analysis of the degree program; and the development of the curriculum structure with TLA and assessments methods based on the analysis of stakeholder expectations and international experiences. This led to the development of a standardized course specification for the degree program linking course ILOs and TLA mechanisms (Spady, 1994; Tam, 2014). This process became a formal component of the degree program from next phase of development.

Period of increased importance of corporate planning and SLQF becoming mandatory. In the corporate plan for 2013–2016, DA identified its first goal as “formalizing and implementing the whole-person development approach to the degree program” (DA, Corporate Plan 2013–2016). Accordingly, DA developed a graduate profile for the degree program in line with the whole-person development approach. It considered stakeholder expectations, requirements of national frameworks on education (i.e. SLQF (UGC of Sri Lanka, 2015) and SBS for accounting (QAA, 2016)), IESs of IFAC (2017) and graduate attributes identified in international accounting degree programs. The head of DA reminisced:

Though DA considered developing a resourceful accounting graduate from the inception, at no point had it formally documented what is meant by the term “resourceful”. Hence, at this point, we developed and documented the desired graduate attributes of the degree program, which was followed in the next curriculum revision as the base document.

Accordingly, DA developed its graduate profile and graduate attributes, and revised the ILOs of the accounting degree program, similar to an approach suggested by Tam (2014), Biggs (1996, 2014) and Spady (1994) (see the following list and Appendix 1). This graduate profile provided the basis for the revision of the curriculum of the degree program in 2016.

Graduate profile and graduate attributes of the accounting degree program (DA, 2018):

(1) Graduate profile:

- Students who have completed the BSc Accounting Degree will have acquired an advanced level of education including both specialist knowledge and general intellectual and life skills that prepare them for gainful employment and effective citizenship with a firm foundation for continuous learning and personal development. They will form a distinct clan with a strong sense of professionalism, a desire for continuous improvement, confidence and adaptability, ability to communicate and cooperate, and deep empathy for the needs of the wider society.

(2) Graduate attributes:

- knowledgeable and skilled in accounting and business (GA1);
- knowledgeable and skilled in relating accounting to its wider socio-political context (GA2);
- enterprising and adaptable to change (GA3);
- critical thinkers with analytical and problem-solving skills (GA4);
- reflective knowledge seekers committed to life-long learning (GA5);
- skilled in communicating accounting and management issues in professional and business contexts (GA6);

- effective leaders with self-awareness, interpersonal skills and aesthetic sense (GA7); and
- responsible citizens who are ethical and professional in action (GA8).

From 2015, compliance with SLQF becomes mandatory for degree programs of Sri Lankan universities and OBE is at the center of the new program review manual of UGC. This further necessitated some changes to the degree program. Table II shows how the present curriculum of the degree program is aligned with the program learning objectives (PLOs) of the degree program given in Appendix 1 along with the four main streams (accounting, management and finance, skills development and research) and sub-streams of the degree program, under which its courses have been identified and the curriculum is developed. This curriculum mapping demonstrates that the accounting degree program has delineated its courses and their contents based on the PLOs of the program (Spady, 1994).

5.1.2 Process – TLA of the accounting degree. Period of inception and initial development. At the beginning of the degree program, lectures were the main pedagogical method. In addition, computer practical sessions, tutorials and group work were used as instructional methods, where students were given more opportunities for active learning. Further, internship was an important component in the third and fourth years of the degree program, where the students had the opportunity to actively engage in learning. These methods largely continued without much change until the quality assurance systems were introduced to the university system.

Period of quality assurance being introduced to the university system. A major milestone toward TLA during this period was the introduction of the course unit system from 2001. Though active learning mechanisms such as individual and group studies had been followed, these were not recognized as a formal requirement in many courses until this time. They had been mainly carried out based on the nature of the courses and personal interest of academics who were involved in these courses. Under the World Bank funded IRQUE Project, the concept of SCL was officially recognized by DA. Several student activity centers – a computer lab, a language laboratory and a research and information center – were improved/developed

Main streams	Weight (%) ^a	Sub-streams	PLOs											
			1	2	3	4	5	6	7	8	9	10	11	
Accounting	41	Financial accounting	X	X	X	X	X		X			X	X	
		Management accounting	X	X	X	X	X		X			X	X	
		Governance, auditing and assurance	X	X	X	X	X		X			X	X	
		Taxation and law											X	X
		Accounting information systems and modeling	X	X	X						X		X	
Management and finance	38	Management	X	X								X	X	
		Finance	X	X	X									
		Economics	X	X										
		Quantitative techniques	X	X										
Internship and skills development	16	Internship in accounting and finance		X	X		X	X	X	X	X	X	X	
		Management and personal capacity skills development										X	X	X
		Communication skills development										X	X	
Research	6						X	X	X	X		X		

Table II.
Mapping of the curriculum to the PLOs of the degree program

Note: ^aThese weightages have been calculated based on the credit values of the degree program

to facilitate SCL in the degree program. The quality assurance reviews carried out on the degree program in 2003 were also an impetus for improving SCL methods used in pedagogy. During this period, the formal evaluation of a range of TLA used in courses of the curriculum was done with the ILOs of the degree program.

Period of increased importance on corporate planning and SLQF becoming mandatory. With the increased importance attached to corporate planning and identification of graduate attributes in line with SLQF, SBS in Accounting and IESs of IFAC, the TLA have improved considerably. Hence, at present the range of TLA is used in the degree program. However, they differ in terms of the nature of the courses as depicted in Table III.

Subject streams	TLA	Assessment type
<i>Accounting stream</i>		
Financial accounting	Lectures, tutorials, workshops, lecture recordings, guest sessions by industry experts, group discussions and presentations, case analysis	Mid-term exam (MCQ)/quizzes, group assignment/presentation, class room presentations, final paper (structured with scenarios/mini-case studies)
Management accounting	Lectures, tutorials, field studies, guest sessions by industry experts, group discussions and presentations, case/research paper analysis	
Governance, auditing and assurance	Lectures, case analysis, guest sessions by industry experts	Case study analysis, final paper
Taxation and law	Lectures, group assignments/presentations, spot tests	Mid-term paper (MCQ Type), final paper
Accounting information systems and modeling	Lab lectures, computer practical sessions, video clips, class room activities (computer package based/model building exercises/case studies), guest sessions by industry experts	Mid-term and final papers (computer based)
<i>Management and finance stream</i>		
Management	Lectures, tutorials, role plays, presentations	Mid-term paper (MCQ Type), final paper
Finance	Lectures, tutorials	
Economics	Lectures, tutorials	
Quantitative techniques	Lectures, tutorials	
<i>Skill development stream</i>		
Internship	Internship placement in a firm of public accountants or a corporate/public sector organization	Training records evaluation, training supervisor evaluation, presentation, viva
Management and personal capacity skills development	Guest lectures, workshops, skill projects, reflective logs, presentations	Presentations, reflective logs, portfolio of learning experiences, skills development file
Communication skills development	Lectures, language laboratory sessions, individual and group discussions	In-built texts of English language package, reflective logs, group assignments and presentations, academic essays
<i>Research stream</i>		
Research methodology	Lectures, research article reviews, research proposal development, data analytic lab sessions	Research proposal and presentation, final paper (paper-based plus SPSS-based scenario analysis as a lab paper)
Research in accounting	Research study	Research paper

Table III.
TLA and assessments of the degree program

It is observed that a range of TLA is used at present to address the various ILOs of courses to foster deep learning as opposed to surface involvement with information (Walsh, 2007). Whilst lecturers and tutorials are commonly used in all courses, depending on the focus area, various in-class or out of class activities are also used. Further, the extent of such activities varies depending on class-size. These types of TLA enable the students to know and be able to do as they move into different organizations that perform different functions (Lawson *et al.*, 2014). Next section focuses on the assessment methods used in the degree program to address the achievement of its ILOs.

5.1.3 Product – mix of assessments of the accounting degree. Period of inception and initial development. In the early days of the degree program, the focus was mainly on the final examination though continuous assessment was practiced in some courses. This was mainly linked to the annual system of instruction followed in the degree program. However, over time continuous assessment became an essential element in the assessment and most courses introduced it despite following the annual system of instruction. It became a compulsory requirement in the subsequent periods.

Period of quality assurance being introduced to the university system. Examination by-laws relating to both final examination and continuous assessment had been developed in the early 2000s with the introduction of the course unit-based semester system to the degree program. In the accounting stream, there was a greater inclination toward practice-based assessments (i.e. students have been assessed based on problem-based practical/filed studies). These improved the ability of students to apply theoretical concepts in practical scenarios and develop generic skills along with the application skills. Further, an improvement is observed in the rubric of question papers over time and more use of case/scenario-based structured questions.

Another notable development aspect is the conversion of non-graded internship courses as graded-semester-based course units with the introduction of the semester system. This has enabled assessing the training experience of students. Further, learning management systems are used for assessment of courses particularly in MCQ type mid-term exams or quizzes. Extensive use is also made of in-class assessments by way of presentations linked to group assignments of students.

Period of increased importance on corporate planning and SLQF becoming mandatory. In this period, it is witnessed as an improvement in the types of assessments in the courses of the degree programs. Hence, currently the degree program uses a variety of assessment methods (see Table III). The use of a range of assessment methods reflects the use of different means of assurance of learning aligned with the ILOs of courses in the degree program. It also provides evidence of a constructive alignment of assessment modes with course ILOs (Biggs, 1996, 2014). However, it is a moot point whether these assessments are a burden on the students who follow several courses in a semester within a limited time frame. As students undergo internship during their third and final years, there is a greater challenge for students to manage the assessments of different courses offered in a semester. A fourth-year student held quite a negative view of continuous assignments:

We need to go for internship in the day time and lectures in the night. It is very difficult to find time to do continuous assignments [...] Another problem is when we get continuous assignments from different subjects in the same semester [...] It is very difficult to focus on other things in life during this four-year period.

This suggests that the different modes of assignment, especially continuous assignment, have created a burden for the students in a semester-based system while they obtain internship training leaving them with reduced opportunities for learning and development activities in other aspects in life.

5.2 Impact of national and international educational frameworks on OBE model

In order to answer the second research question, this section analyzes the impact of national and international education frameworks on the OBE model adopted in the degree program in terms of developments of ILOs, and alignment of TLA and assessment tasks with them.

5.2.1 *Presage – ILO and content development.* The impact of these frameworks can be observed mainly in the development of graduate attributes in the degree program. In this respect, the SLQF (UGC of Sri Lanka, 2015) provides the basis as the degree program is placed at SLQF Level 6 Bachelor’s Honors. Accordingly, it should provide a broader education to consolidate and strengthen students’ knowledge in a particular discipline and develop the research capacity and skills in that discipline of postgraduate studies. Within a broad generic framework, more subject-specific guidelines have been provided by the SBS for accounting (see QAA, 2016). It classifies the attributes of an accounting degree holder under two broad headings: subject-specific knowledge and skills; and cognitive abilities and related general skills. Explaining this impact, a senior lecturer in DA who had significant experience in the curriculum revision, said:

SLQF provides the broader framework to set the curriculum in general. More specific guidelines for an accounting degree are outlined in the SBS in Accounting. In our recent curriculum revision, we had to always check how we can comply with these requirements.

In addition to these national frameworks, the degree program has given due consideration to the IESs of IFAC (2017) in designing the graduate attributes required in the accounting profession. Confirming this view, the former head of the DA had this to say:

Consideration of the accounting standards [i.e. IES of IFAC] becomes the norm in accounting education. In addition to SLQF and SBS we consider IESs since they provide more specific, globally accepted guidelines in setting a syllabus.

Accordingly, the graduate attributes of the degree program can be matched with these national and international educational frameworks as shown in Table IV. Hence, ILOs of the degree program have been developed to address the knowledge, skills, and attitudes and values that an accounting degree holder should possess (IFAC, 2017; Lawson *et al.*, 2015). The ILOs of courses of study in the degree program are aligned with these degree-level ILOs.

5.2.2 *Process and product – TLA and assessment.* The impact of these frameworks can also be seen in the TLA and assessments of courses as they have been aligned with the ILOs of the degree program as shown in Figure 2. It shows how the national and international educational frameworks have impacted on the development of the ILOs and curriculum of the degree program of the OBE model and SCL methods with appropriate assessment modes in alignment with the ILOs as prescribed in the theory of constructive alignment.

Graduate attributes	SLQF Level 6	SBS in Accounting	IESs
GA1	Knowledge	Subject-specific knowledge and skills	Technical competence (IES2)
GA2	Subject/Theoretical knowledge		
GA3	Practical knowledge and application		
GA4	Skills (e.g. communication, team work and leadership, adaptability and flexibility)	Cognitive abilities and related general skills	Professional skills (IES3)
GA6			
GA7			
GA5	Mind-set and paradigm		
GA8	Attitudes, values, professionalism and vision for life		Professional values, ethics and attitudes (IES4)

Table IV.
Matching graduate attributes with SLQF, SBS and IESs

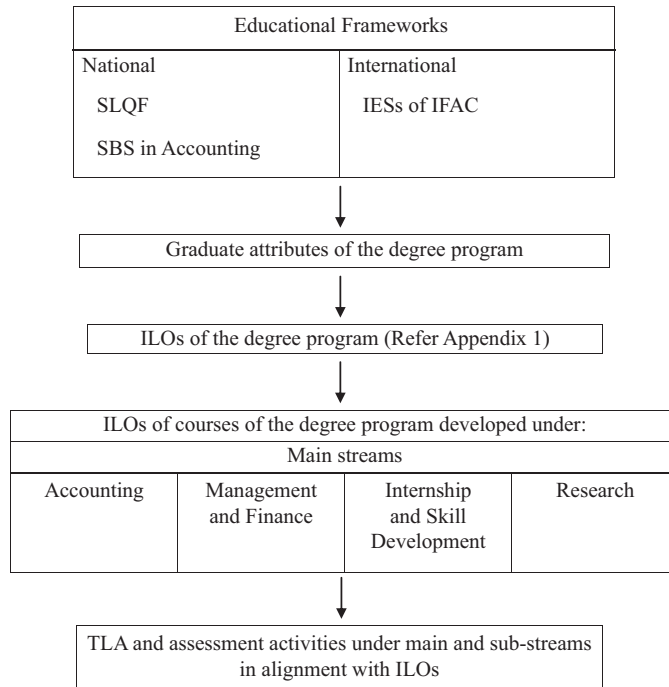


Figure 2. Stemming of ILOs, TLA and assessments of the degree program in line with its graduate attributes

The next section presents the discussion of the study based on the inferences drawn from this analysis.

6. Discussion

The above analysis of the study leads to several important points for discussion and implications, which are presented in this section. First, the study shows how the OBE model has been implemented in an accounting degree program in a developing country in conformity with the theory of constructive alignment. Hence, the study shows that in the accounting discipline, the most significant imperative for the OBE stems from normative pressures such as IESs of IFAC and SBS in Accounting. The remarkable influence of international professional accounting organizations such as IFAC on academic accounting education can be attributed to the power built by the PABs over a period of time to institutionalize the professional concerns in the accounting profession and education (Lee, 1995). Since these accounting education frameworks have closely followed the approach suggested by Biggs (1996, 2014) in his theory of constructive alignment, the normative institutionalization of professional standards in accounting supports OBE in accounting education. However, the pursuance of professional accounting education standards or accreditation standards should be handled with care. First, the emphasis on criteria-referenced approaches in these standards could lead to a restricted and mechanistic model of teaching and learning which excludes the higher order domains of beliefs, attitudes and values as needed in the contemporary business environments (Elliott, 1996). Due to the lack of supporting systems, administrative and reporting mechanisms and resources in most of the educational institutions in developing countries (Bordia, 2001) increased focus on OBE due to the influence of professional and accreditation standards can exert extra pressure on the academics (Senaratne and Gunarathne, 2019). This would lead to a lack of

academics' motivation for the implementation of these standards while creating a demotivating impact on them (Van Kemenade and Hardjono, 2010).

Second, a closer analysis of the initial development periods of this study program suggests that some of the OBE features can be incorporated into accounting education even without a systematic process as promoted by Spady (1994) due to a market-oriented approach followed in designing accounting courses. The imperatives for market orientations in accounting education can come from national-level contextual factors such as the desire to improve the employability of graduates or funding, which echo similar factors that gave rise to the development of OBE in developed countries such as the USA and the UK (Mulder *et al.*, 2007; Spady, 1994; Tam, 2014). However, the formal approach advocated in the constructive alignment by way of developing graduate attributes and program ILOs and design of course specifications (Biggs, 1996; Spady, 1994) had taken place in this study program later due to a mix of pressures from various normative forces such as the aforementioned influence of professional accounting organizations and quality assurance systems for universities and coercive forces such as national qualification frameworks and funding sources such as World Bank (Senaratne and Gunarathne, 2010). Hence, it is clear that with the passage of time, OBE which was initially a voluntary engagement of the degree program becomes a hybrid response to normative pressures and mandatory requirements associated with quality assurance, accreditation and funding.

Third, irrespective of the drive for OBE, this case provides evidence of how the outcome-based approaches adopted in accounting benefit many stakeholders including students, teachers, employers and policy makers (Harden, 2015). Especially its main beneficiary, the students can enhance their employability by catering to the needs of the business world with the requisite knowledge, skills and research (AACSB, 2018a; Salin, 2011). In the case of Sri Lanka, this is clearly noticeable as its graduates have been able to secure employment in many regions such as Africa, the Middle East and Australasia (Senaratne and Gunarathne, 2017; World Bank, 2015). This further confirms the validity of adopting global accounting education standards such as IESs in the academic institutions so that its graduates can work in the global market place.

Finally, this study points out some of the practical challenges in implementing OBE in accounting. In order to garner the relevant professional competence in accounting, which constitutes of technical competence; professional skills; and professional values, ethics and attitudes (IFAC, 2017; Lawson *et al.*, 2014, 2015; Pathways Commission on Accounting Higher Education, 2012), a variety of TLA (including internship) and assessment methods will have to be followed. As students' experience shows, these diverse TLA and assessments pose many challenges such as "fractionation," a situation where TLA and assessment of "outcomes could become too focused on the student's acquisition of skills and knowledge so that other more important developmental outcomes over time are ignored" (Tam, 2014, p. 165) while adding too much pressure on students' learning experience and quality of education in a broader context (Bagnall, 1994). Hence, OBE should not be viewed as a panacea (Gurukkal, 2018) for the problems in accounting education such as the long-lasting disconnect between university accounting education and expectations of society (Kullberg *et al.*, 1989; Lawson *et al.*, 2014; Pathway Commission, 2012).

Our findings have several implications for theory and practice. From a theoretical perspective, they highlight how the theory of constructive alignment (Biggs, 1996; Biggs and Tang, 2011) can be operationalized in disciplines that are professionally oriented such as accounting with the use of accounting education frameworks. Since these frameworks as well as national education frameworks emphasize the approaches of and needs for OBE in largely similar ways, the achievement of constructive alignment in accounting education can be achieved by maintaining an agreement between ILOs and TLA and assessments (Tam, 2014; Treleaven and Voola, 2008). As this alignment is more incidental than planned,

it further reveals that the convergence of higher global standards of OBE in accounting is already taking place without a central body to govern (Sugahara and Watty, 2016; Reed *et al.*, 2002). However, this process of convergence of accounting education should be viewed with caution. Although OBE is a transparent system, there are some misgivings about it producing and reproducing the techno-economic system that is already predominant (Gurukkal, 2018). This would thus lead to the need for a broad socio-economic, cultural and political context in which the accountants need to operate in the future.

From a practical perspective, this study offers several implications for accounting educators, policy makers and accreditation bodies. For accounting educators, the study first underscores that OBE is becoming an essential approach to consider in curriculum design, teaching and assessment to make the accounting graduates ready for the needs of the market place (AACSB, 2018a, b; Lawson *et al.*, 2014, 2015; Pathways Commission on Accounting Higher Education, 2012). Next, accounting educators should consider a variety of education frameworks such as IESs of IFAC, SBS in Accounting, and AACSB standards in addition to the national qualification frameworks in moving toward OBE. Third, this study also emphasizes that accounting educators should use a variety of TLA and assessment approaches to developing the competencies of accountants as expected by IFAC (2017) and Lawson *et al.* (2014) that are in line with the changing expectations of the accounting profession. For instance, in emerging sub-disciplines such as sustainability accounting and reporting, accounting educators should focus on a pragmatic approach by focusing on field visits, real-life case study-based assessment methods, and guest seminars and workshops where practitioners and industry professional share their experiences in addition to using conventional classroom-based TLA (Gunaratne and Alahakoon, 2017). However, caution is needed against excessive focus on outcomes to the neglect of other development needs of students.

For the accreditation bodies, the study first emphasizes the need for a convergence of accreditation standards. As there is already a large number of international and national standards on accounting education, there should be a clear alignment between them to make the OBE adoption process easier for accounting educators. This requires these accreditation bodies to work collaboratively in defining and setting a common set of globally acceptable standards and guidelines that allow flexibility for accounting educators to incorporate their unique contextual constraints and imperatives. Further, the accreditation bodies need to provide clear guidelines, standards and principles to facilitate the adoption of OBE in curriculum design, TLA and assessment for accounting educators. This has to be further accompanied by rigorous quality assurance mechanisms to ensure that the education approaches followed by the education programs meet the expected quality. Moreover, due to the fast-changing nature of the field of accounting (Pathways Commission on Accounting Higher Education, 2012), accreditation bodies will have to continuously monitor and update their standards to make them relevant.

From a policy-making perspective, it will be desirable for the national-level education standard setters to align their national qualification frameworks with international frameworks that govern accounting education so as to facilitate the adoption of OBE in accounting with ease. Further, policy makers should provide the necessary facilities, resources, teacher training programs and incentives for accounting education institutions and educators to transit to an OBE model from their traditional teacher-centered approaches. As this case explains, it will also be necessary for policy makers to gradually make OBE approaches and OBE-based accreditation mechanisms mandatory in order to ensure that the educational programs meet the needs of the business world. This is an important consideration in many of the developing countries including Sri Lanka where there is a shortage of skilled workers that hinders the economic and social development of a country moving from agriculture to higher-value-added industry and services (Aturupane *et al.*, 2014; Dundar *et al.*, 2017).

7. Conclusions

This study aimed to discuss the operationalization of the OBE model in an accountancy study program in Sri Lanka and the impact of education frameworks on OBE. It showed how the OBE model has been operationalized in the accounting degree program from its inception and how the national and international educational frameworks impacted on this process over time particularly in aligning the ILOs, TLA and assessment tasks of the study program. This study also discussed some important implications for accounting educators, accreditation bodies and education policy makers.

By discussing this case of the accounting degree program, the paper theoretically contributes to the adoption of the OBE model in university education in general and improvement of university accounting education to meet the needs of the accounting profession in particular (Bedford *et al.*, 1986; Kullberg *et al.*, 1989; Pathways Commission on Accounting Higher Education, 2012; Lawson *et al.*, 2014). Further, this study extends this discussion to a developing country context in South Asia by highlighting its unique socio-economic context in which the accounting profession operates. These theoretical contributions and implications should be analyzed together with some of the limitations of this study which, in turn, suggest different avenues for further research. First, the qualitative case study method used limits the generalizability of its findings (Yin, 2013). The results should only be theoretically generalized in a contextual way (Lukka and Kasanen, 1995). This therefore calls for future studies using a multiple case study approach or survey method with a wide sample base to enable conclusions on a national or regional level on how OBE is practiced in accounting in higher education. Second, the study also reveals how the institutional field of accounting exerts pressure on the accounting degrees (and PABs) to incorporate OBE and other TLA such as internship. It will be interesting for the future studies to explore how OBE is institutionalized in accounting or even in business education in general due to the pressure exerted by isomorphic forces of DiMaggio and Powell (1983). Next, it will also be important to explore the challenges and opportunities for future developments in adopting OBE in other disciplines of business education such as marketing and human resources. Similarly, it will be necessary to critically examine the benefits and limitations of outcomes-based approaches in accounting education through a philosophical analysis (Bagnall, 1994; Mitchell *et al.*, 2006).

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Further reading

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Appendix 1. Program learning outcomes (PLOs)

PLO1: demonstrate knowledge and understanding in the field of accounting and allied fields.

PLO2: apply subject-specific knowledge and professional skills in diverse business situations in local and global environments.

PLO3: demonstrate knowledge and understanding of contemporary technologies and their application to professional and business contexts.

PLO4: identify emerging trends in the local and global business environments and introduce innovations to enhance effectiveness of accounting practices.

PLO5: analyze and critically evaluate arguments and issues pertaining to the accounting discipline.

PLO6: apply research skills to devise solutions to practical issues pertaining to accounting.

PLO7: recognize the need to engage in independent and life-long learning.

PLO8: communicate effectively both, oral and written, in professional and business contexts using appropriate technologies.

PLO9: demonstrate leadership and interpersonal skills in workplaces of cultural and linguistic diversity.

PLO10: show understanding and commitment to professional ethics and responsibilities of the accounting practice through behavior.

PLO11: demonstrate understanding of social and civic responsibilities, human rights and matters pertaining to sustainability.

Source: DA (2018)

Appendix 2

Respondents	2016	No. of times 2017	2018
Head of department	1		1
Founding head of department	1	1	
Senior lecturers (including two former heads of department)	1	2	1
Junior lecturers	1	1	1
Passed-out graduates	2	2	2
Final-year students	1	1	4
Total	7	7	9

Table AI.
Details of the interviews

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