An Approach to Course Design for Introductory Financial Accounting

Ron Baker
University of Guelph

Abstract
Over the years accounting education has been criticized for being out of date, promoting superficial learning and not developing broader skills required by today’s university graduates. Accounting educators also face the challenge of designing an accounting program that meets AACSB assurance of learning standards. This article presents an approach to course design that integrates broad competencies and interdisciplinary themes into the content of introductory financial accounting. The paper draws on post-secondary education and accounting education literatures to inform the approach which includes a general framework, a reflection process, and a course design matrix.

Introduction
Universities have been criticized for employing dated pedagogical approaches that are not conducive to student learning (Christensen Hughes & Mighty, 2010). Accounting education in particular has been the target of much criticism in recent decades most notably by Albrecht and Sack (2000) in their influential review of accounting education in the United States (also see Gibbins, 2002; Pincus, 1995). In their report, Albrecht and Sack note that course content and curricula is outdated and too narrow, pedagogy lacks creativity and professional skills are not being developed (p. 51). In addition to responding to these criticisms, accounting educators also face the challenge of developing and implementing assurance of learning plans for accreditation from the Association to Advance Collegiate Schools of Business (AACSB), a process still under development in over fifty percent of schools surveyed in a recent study (Christensen, Judd, & Nichols, 2011).

This article presents an approach to course design for introductory financial accounting comprised of a general framework, a reflection exercise, and a course design matrix. The purpose of developing a systematic approach is to provide a tool that facilitates addressing the abovementioned concerns through the course design process. By adopting this approach accounting educators can design an introductory financial accounting course that contributes to the university or college’s accounting and business program objectives, is responsive to the needs of various stakeholders, and supports AACSB accreditation efforts. It encourages linking course objectives with program-wide curricula goals and promotes the use of assessment instruments that measure desired course-specific and broader learning outcomes.

The approach corresponds with AACSB Standard 15 of using “…a well documented, systematic process to develop, monitor, evaluate and revise the substance and delivery of the curricula of degree programs and to assess the impact of the curricula on learning” (AACSB, 2007, pg 3). It does so by employing the spirit of this standard at the course level. Previous studies have noted the extensive time requirement associated with AACSB accreditation (Gaharan, Chaisson, Foust & Maudlin, 2007; Sinning & Dykxhoom, 2001). This paper may be useful to those seeking a systematic approach to develop or redesign an introductory financial accounting course that responds to criticisms of accounting education and contributes to the accreditation process.
The paper is organized as follows. First the general course design framework is described followed by an abbreviated application. Next, a description of two other components of the course design approach is presented: the course design matrix and the reflection process. The paper concludes with some final remarks summarizing the approach.

A Proposed Introductory Financial Accounting Framework

This paper develops a general course design framework with an aim to provoke a critical examination of choosing, presenting, using and assessing introductory accounting course content. It is intended to be supple and broad in order to accommodate a variety of approaches to teaching and learning and the context where teaching and learning take place. As one author notes, “one general approach could never suit all…purposes” since teaching effectiveness depends on a “host of interacting influences” (Entwistle, 2010, p. 16). As such the framework was developed as a guide for course design but is devoid of specific prescriptions for teaching styles.

The framework is comprised of five elements: purpose and objectives, competencies, content, themes and outcomes. These elements are situated in an environmental context. The purpose and objectives are the guiding statements for the design and delivery of the course. Broader skills that can be developed across the curriculum are classified as competencies. At the core of the framework is the content, the specific topics and material expected to be mastered by students. In addition to competencies and content-specific knowledge, there are institutional values embodied in program or university-wide statements of purpose. These values are classified as themes. The next element comprises the desired, measurable outcomes, which are the end product of the instructional process (King & Evans, 1991). It is this component of the course design framework that supports assurance of learning for the accounting and business program. Finally, each and every university course is designed and delivered within an environment. The course environment can be viewed as a multi-level, social sphere encompassing the specific organizational unit responsible for the course, the university, the society which supports the university and, in the case of accounting, professional associations and the business community. The five elements of course design are constructed in response to influences and demands from the environment.

Figure 1 depicts the generic form of the framework. A brief description of each element of the framework follows.

Course Purpose and Objectives

The first element incorporated into the framework is the purpose and objectives of the course. These are often articulated through course objectives on the syllabus. Accounting courses are not conducted in a vacuum but are part of the wider academic and social community. As one author argues, “academics must listen to the needs expressed by the profession and evaluate those, keeping in mind the needs of society as a whole” (Reckers, 2006, p. 38).

The process of determining the purpose and objectives begins then by considering the demands of the environment. Examples include developing critical-thinking and communication skills required by the profession (AECC, 1990) and promoting the values of the university. An introductory course presents an excellent opportunity to contribute to the process of helping students “learn how to learn” (Pincus, 1995, p. 93), a skill they will take with them and develop further in subsequent courses. Transferable skills, learning skills, and institutional values are some examples of the broad, holistic course objectives that can be developed in response to environmental demands. These are not necessarily the course objectives found on the syllabus, but the vision from which those objectives are teased out. Specific course objectives with measurable outcomes (see, for example, Spady, 1994) can then be identified for the content, competency, and theme elements, although this process should be exercised with caution in recognition of the underlying tension between overly specific objectives with broader higher education goals (Paisey & Paisey, 1996).

Content

At the core of the framework is content. Summerlee and Christensen Hughes (2010) argue that in order to provide education that is relevant and engaging, teaching and learning should focus on the “process of learning” (p. 257)
stating “university education should be about process, not content” (p. 253). Content is important, however, and a base knowledge of the subject matter is required for students to make sense of the course material (Entwistle, 2010). A base knowledge of accounting is a requirement of students preparing for accounting careers (AECC, 1990, pg. 3). It matters in accounting education where certain topics must be covered in order to qualify students for the accounting profession and to satisfy accreditation requirements. Content, however, can be more than simply a body of knowledge that must be learned by students. It can also serve as a medium for the development of competencies.

**Competencies**

Competencies, the third element in the framework, refer to those skills that transcend the content of a specific course. Both the profession and constituents from the wider community have called for an educational experience that promotes critical thinking, team work, communication skills, and learning to learn. This element in the framework specifically addresses AACSB Standard 40 requiring the development of a broad education (AACSB, 2011a).

**Themes**

The fourth element, themes, is also linked to content. Themes are matters that will pervade much of the course, are recurring in nature, and use the core content as the context in which these matters are examined. For example, the topic of ethics in accounting could be treated as content in the course and be the subject of one or two classes. Alternatively, it can be treated as a theme that runs through the entire course using accounting to provide the context for examining the role of ethics in the accounting profession, the business community and in decision-making.

**Outcomes**

The final element is the desired learning outcomes and the means by which these are measured. The relationship to the competencies, content, and themes of the course is depicted with double arrows to represent the mutually influential nature of outcomes to these elements. Specific objectives may be established with respect to a course and these need to be accompanied by instruments to measure whether or not a student has achieved them. Increasingly, it is recognized that the instruments used to measure success impact the learning process itself, perhaps more than any other component of the course (Hand, Sanderson, & O’Neil, 1996; Gibbs, 2006). By linking outcomes to content, competencies, and themes assessment instruments will reflect course-specific objectives, program objectives, and the university’s mission. If the assessment instruments in the course are designed to measure learning outcomes related to critical-thinking and communication skills, rote memorization of material will not suffice. Because of this, superficial learning strategies can be discouraged. The framework, therefore, promotes assurance of learning by integrating program and university level learning objectives into the course design process and explicitly linking desired outcomes and assessment instruments to these objectives.

**Environment**

The preceding five elements are located within the course’s environment. It is the environment that shapes, influences, and constrains course design. Subsequent courses for which introductory financial accounting is a prerequisite can impose expectations. The profession influences content and competencies while accreditation affects content, competencies and the learning outcomes measurement process. The expectations and goals of the local and wider community also have an impact on the course.

**Framework Application**

To illustrate the use of the framework, this section describes an abbreviated application of it to the University of Guelph’s introductory financial accounting course.

Introductory Financial Accounting is a required course for the University of Guelph’s Bachelor of Commerce program and is taken by both accounting and non-accounting students. Responsibility for the course rests with the Department of Business in the College of Management and Economics. The college’s mission is to promote “social and ethical responsibility and (to) prepare graduates for leadership roles that will improve the effectiveness of their organizations and the well-being of people in Canada and around the world” (University of Guelph, 2010). The college and the university are also committed to sustainability. The accounting program is designed to qualify
students for entry into any one of the three professional accounting programs in Canada that lead to an accounting designation.

While influences arising from the environment are myriad, for the purposes of this paper the focus will be limited to three factors. Each of these is linked to an element in the framework:

- The course’s place as part of an accounting major (content)
- The university’s commitment to social responsibility, ethics and sustainability (themes)
- The university’s commitment to broad learning objectives (competencies)

Since one of the main goals of the accounting program is to provide all the courses necessary for students to pursue a professional accounting designation, course content must meet the requirements of the profession, as per AACSB Accounting Standard 38. AACSB Accounting Standard 37 provides a more detailed content requirement including providing learning experiences in “recording, analysis, and interpretation of historical and prospective financial and non-financial information” (AACSB, 2011b). Specific content is also guided by other courses in the program and environmental influences. While there are constraints regarding the content that is covered, there is latitude with respect to how it is covered.

The second factor for consideration is the college and university missions of promoting social and ethical responsibility and sustainability. While both are integral parts of accounting education they also transcend business topics and traditional disciplinary boundaries (Kerr & Smith, 1995; Galea, 2004). The interdisciplinary nature of these topics suggests their inclusion in an introductory financial accounting course should be done in consultation with program faculty teaching other courses that address these issues. This way, courses complement each other with each working towards achieving common, program-wide learning outcomes. The inclusion of sustainability and ethics in the college’s mission statement connotes their nature as underlying organizational values. This suggests a thematic rather than a compartmentalized approach to inclusion in the course.

The final factor reflects concerns from the local university community, the accounting profession, and the wider society. Specific competencies identified here include critical thinking skills, writing skills, and group work. This representational list reflects competencies important to both the accounting profession and the University of Guelph.

Based on these factors, the broad purpose and objectives of the course can be summarized as:

1. Support the college’s objective of preparing accounting students to meet the requirements for entering the accounting profession;
2. Support the mission of the college and university to promote ethical leadership and sustainability;
3. Contribute to the university’s (and the profession’s) goals of providing an educational experience that develops critical thinking, writing, and team work skills.

Once these broad objectives are identified, more specific course learning objectives can be developed. Instructors employing a learning model such as Bloom’s taxonomy (1956), Rowntree’s (1974) primary levels of objectives, or the four stage learning cycle (Kolb, 1984) would link the model of choice to the set of course learning objectives that are developed for the content, theme and competencies elements. Because of the widespread familiarity with the model and its continued use in business education (Nentl & Zietlow, 2008), Bloom’s taxonomy of objectives within the cognitive domain will be referenced here for demonstration purposes.

In the generic framework presented as Figure 1 content is represented opaquely as a central element. This is intentional in order to accommodate the variety of content decisions that arise from the approach adopted by the instructor. Familiar approaches include user, preparer or case study. At the University of Guelph, the course is offered to accounting majors, non-accounting business students, and students from other disciplines. This raises the challenge of demonstrating the relevance of the content to a variety of students and presenting it in a way that is meaningful to them. Demonstrating that accounting is meaningful to both accounting and non-accounting students...
is important since the perceived relevance of content influences the learning approach adopted by students (Lucas, 2001).

A suggested approach to address this challenge is to classify the content into three inter-related groupings: architecture, interpretation and evaluation, and decision-making. While some content may be specific to each group it is not necessarily the content that defines the grouping but the approach taken to present the content.

Architecture refers to what accounting is and how it is constructed. It is comprised of base knowledge that would include topics such as the conceptual framework of accounting, accrual versus cash-basis accounting, the accounting cycle, and internal control along with various specific accounting topics such as accounting for inventory and depreciable assets. The approach is to teach the structure and essence of accounting as a subject matter and profession. The primary goal of delivering material from this perspective is to provide a foundation of knowledge and understanding of accounting.

The second grouping, interpretation and evaluation, adopts a user approach to financial accounting. Content specific to this grouping would include evaluative tools such as ratio, horizontal and vertical analysis. The approach is that of an external user with the emphasis being placed on interpreting financial accounting information and formulating judgments and opinions.

The decision-making grouping engages with the content from the perspective of a manager. This approach is intended to encourage students to arrive at informed managerial decisions using accounting information. Cash budgeting and management, debt versus equity financing decisions, credit policies, and lease versus buy decisions, for example, present opportunities for students to use accounting information for decision-making.

While these groupings give the appearance of compartmentalizing content into discrete information packets each group is linked. It is these linkages that promote a more comprehensive, holistic understanding of accounting. For example, a debt versus equity financing decision may be approached from a decision-making perspective but would draw heavily from accounting architecture to determine how accounting treats each decision and how the decision is reflected on the financial statements. The implications of the decision as reflected on the financial statements can be drawn out through the use of evaluative instruments, such as a ratio analysis.

Three specific competencies to be developed within the course and across the curriculum have been identified. Competency objectives influence the delivery of the content and are connected with desired outcomes and the assessment instruments employed in the course.

Critical thinking “requires the students to construct actively their own knowledge or solution” through analyzing an issue using all available information (Sanchez, Hight, & Gainen, 1995, p. 69). The development of this competency occurs in the decision-making and evaluative approach to content. The architecture provides the structure and the core knowledge required to comprehend and make use of the information. It is the requirement to arrive at a managerial decision or an evaluation exercise culminating in an opinion, however, that places demands upon the students to engage in a critical thinking process. The explicit identification of this competency can guide the learning activity or prompt a more complex context in which to introduce the content (see, for example, Hollister, Rich, Shoaf, & Simione, 2004).

The remaining two competencies, communication and group work, draw attention to learning activities and assessment instruments. For the University of Guelph, writing skills have been identified as an area requiring development across the curriculum. Writing activities that are developmental has been shown to increase student awareness of the importance of written communication skills (Feldmann & Usoff, 2001). The introductory accounting course may have limited opportunities for written assignments given the nature of the content that needs to be delivered, but integrating writing curriculum into accounting courses can have positive results (Webb, English, & Bonnano, 1995; Ng, Lloyd, Kober, & Robinson, 1999). One form of assessment, therefore, should include a written submission where feedback is provided and the opportunity for students to revise their submission is given.
The revise and resubmit process provides the developmental component of the writing activity. In addition to the writing activity, a group work component, such as a team project or presentation, must be integrated into the course to build this competency.

The framework depicts both competencies and themes as influences on the approach to content delivery, but there is a subtle, yet significant difference between the two. There is a recursive interaction between competencies and content. Content becomes the medium through which identified competencies can be developed and encouraged. Competencies influence how the content is to be covered, the context in which the content will be covered, and the level of understanding demanded.

Themes, on the other hand, are content. The subject of the course provides the arena in which a theme is explored. The two themes identified here are ethics and sustainability. Ethics could be treated as a single, stand-alone topic, but given its importance to the university and the profession, it is being treated as a theme. As such, ethics will be a recurring topic throughout the course. This can be accomplished through the use of a simple ethical framework to apply to various accounting scenarios with the goal of raising awareness of the effects and complexities of business decision-making.

The decision-making approach of the course presents opportunities for the integration of sustainability as a theme. There are opportunities to reflect on sustainability issues in areas such as the identification of external users of accounting information, choosing suppliers and identifying organizational activity that is not captured by financial accounting.

The preceding section provides an overview of the general framework and an illustration of its use at the University of Guelph. The next section describes two exercises developed to attend to the details of designing the course.

The course design matrix and reflection process

While the framework provides the roadmap for the course integrating competencies and themes into course content delivery can be challenging. To facilitate this process, a course design matrix can be employed. The matrix links the elements of the course identified in the framework using seven categories: topic, content, objective, context, learning activity, integrated competency, and integrated theme. Not all topics will require the integration of a competency or theme or a high level of learning. Introductory accounting can often be a low-level cognitive domain learning experience as many students are introduced to a new core of base knowledge. In some cases simply building a core body of accounting knowledge is the sole function of a learning activity. A particular topic can, however, be introduced using a learning activity that also develops writing or critical thinking skills. A theme can be integrated and developed using a topic area as the context.

A course design reflection exercise can be undertaken to arrive at specific course objectives at the content, competency and theme levels (see Figure 3). The course plan for meeting these objectives can then be constructed using the course design matrix.

The reflection exercise begins with the selection of a topic followed by identifying the specific content to be covered related to that topic. Learning outcomes are developed for the topic area and the specific content covered therein. Next, a decision can be made regarding the approach used to deliver the content. This means choosing between architecture, decision-making, interpretation and evaluation or some combination thereof. Competencies and themes are then considered to determine whether the topic lends itself to the inclusion of competency or theme learning objectives. Following this decision a learning activity is identified and assessment instruments for measuring desired learning outcomes are developed. The reflection process must be undertaken with program objectives in mind. Incorporating competencies and themes encourages this. The process provides faculty with an opportunity to clearly document the course’s role in achieving program-level objectives and learning outcomes and
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thereby supports a program’s adherence to assurance of learning standards. Each step is mapped onto the course design matrix. The reflection exercise will require multiple iterations in order to arrive at a final course design matrix.

Consider, for example, the topic of liquidity in financial analysis. It may be decided that simply introducing students to some standard measures, such as the current ratio, would provide sufficient coverage of this material. If the learning objective is to teach the students what these ratios are and how to calculate them (knowledge or comprehension from Bloom’s taxonomy), a brief lecture and/or short reading and problem assignment would suffice as a learning activity. The learning outcomes could then be assessed through multiple choice or short answer questions on a quiz or exam. This would mean, however, that course objectives related to competency and themes would need to be covered through other topics.

Alternatively, competency objectives such as developing critical thinking and communication skills may be integrated with the content of liquidity analysis. Furthermore, in the course design process, this can be clearly identified as an instance of supporting the program’s efforts towards meeting accreditation standards for learning objectives. In this case, learning objectives should stress the analysis and synthesis cognitive domains and the learning activity and assessment instrument must promote this level of learning. Since critical thinking “involves using knowledge to analyze a problem and reach a sound and valid conclusion” (Camp & Schnader, 2010, p. 656), multiple choice or short answer testing may not be ideal mechanisms for assessing learning outcomes. Instead, an individual or group project requiring a liquidity analysis of two real companies can be used as the learning activity. Using real companies would require the student to find the necessary information, apply the knowledge acquired in the course content, deal with ambiguity and integrate real-world qualitative information in the analysis. Requiring a professionally written report as a product of the learning activity integrates communication skill development into the exercise and provides evidence of learning outcome achievement.

Table 1 offers an illustration of a course design matrix based on the content of a textbook chapter. For the purposes of this illustration, chapter seven from the textbook Financial Accounting: Tools for Business Decision-Making is used (Kimmel, Weygandt, Kieso, & Trenholm, 2009). The chapter deals with Internal Control and Cash, but under this broad topic area specific content is broken up to sections, such as control activities and the bank reconciliation. Each specific content item is considered within the framework of the course and a decision is arrived at through the reflection process to determine the objectives of the content and to identify opportunities for integrating the competency and theme elements.

Table 1 provides only a small sample of the course design, but it does illustrate the output of the course design process. It also illustrates that not all content receives or requires the same treatment. Each content area has an objective that will influence the learning activity assigned to it and the applicability of other course elements. Lecture, problem-based learning, and mini-cases are used in this example but this is not an exhaustive list. Once the objective is determined through the reflection process, outcomes, the applicability of the other elements to the content and associated learning activities are fleshed out as the reflection process is revisited. The process may begin, for example, by considering bank reconciliations and determining that a suitable objective is the teach students how to do them using end-of-chapter problems. The use of the framework proposed in this paper should prompt the course designer to consider other learning opportunities. The bank reconciliation can be taught using simple problems. Alternatively, bank reconciliations can be integrated with internal controls through a mini-case (as illustrated in Table 1). Employing a case format can introduce ambiguity and require information-sifting skills and critical thinking. It can also include an ethics component. By assigning multiple learning objectives to the content a more robust learning exercise is adopted.

**Concluding remarks**

This paper presents a systematic approach to course design for introductory financial accounting using a framework, a reflection process and a course design matrix. The approach is intended to provide a supple, general guide for
course design that encourages a thoughtful approach to delivering content that is sensitive to the needs of multiple constituents.

The approach was developed in response to the criticisms leveled at post secondary education and accounting education in particular. It accommodates a variety of environmental and institutional contexts. It also accommodates a variety of teaching approaches and styles acknowledging that each educator brings to the classroom a unique combination of experiences (both professional and teaching), expertise, world views and talents. The process treats content as knowledge to be learned and as a vehicle for developing broader competencies and skills. Finally, it encourages the incorporation of program and university learning outcome objectives to an introductory course.
REFERENCES


Figure 1

A framework for introductory financial accounting course design

Environmental Factors

Course Purpose and Objectives

Competencies

Content

Themes

Outcomes
Figure 2

A framework for introductory financial accounting course design
for the University of Guelph

Environmental Factors

Competencies
Critical thinking
Communication
Group work

Content
- Accounting Architecture
- Decision-Making
- Interpretation and evaluation

Outcomes

Themes
- Ethics
- Sustainability
Figure 3
Reflective Course Design Process

- Topic
  - Content
  - Learning Outcomes (Cognitive Domain)
    - Context
    - Competency
      - Theme
      - Learning activity
      - Assessment Instrument
      - Matrix Mapping
      - Final Course Design Matrix
### Table 1

**Course Design Matrix**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Content</th>
<th>Objective</th>
<th>Context</th>
<th>Learning Activity</th>
<th>Competencies</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Control and Cash</td>
<td>Control Activities</td>
<td>Knowledge</td>
<td>Architecture</td>
<td>Lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limitations of Internal Control</td>
<td>Knowledge</td>
<td>Architecture</td>
<td>Lecture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Activities over Cash Receipts</td>
<td>Knowledge Comprehension Application</td>
<td>Decision-making</td>
<td>Mini-case</td>
<td>Critical thinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Activities of Cash Payments</td>
<td>Knowledge Comprehension Application</td>
<td>Decision-making</td>
<td>Mini-case</td>
<td>Critical thinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank Reconciliation</td>
<td>Application Analysis</td>
<td>Architecture; decision-making</td>
<td>Problem-based learning; Mini-case</td>
<td>Critical thinking</td>
<td>Ethics</td>
<td></td>
</tr>
<tr>
<td>Reporting Cash</td>
<td>Knowledge</td>
<td>Architecture</td>
<td>Lecture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managing Cash</td>
<td>Knowledge Application</td>
<td>Architecture; decision-making; interpretation and evaluation</td>
<td>Lecture; mini-case</td>
<td>Critical thinking</td>
<td>Sustainability</td>
<td></td>
</tr>
</tbody>
</table>