Learning financial accounting in a tertiary institution of a developing country. An investigation into instructional methods.

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Learning financial accounting in a tertiary institution of a developing country. An investigation into instructional methods.

Abstract
This study examines three instructional methods (traditional, interactive, and group case–based study), and student opinions on their preference for learning financial accounting in large classes at a metropolitan university in Sri Lanka. It analyses the results of a survey questionnaire of students, using quantitative techniques to determine the preferred instructional method. It analyses the written comments made by students in the survey questionnaire using thematic analysis to determine the reasons behind their preference. The findings reveal that the most preferred instructional method is interactive and the least is traditional.

Keywords
developing country, learning, instructional method, Sri Lanka, Accountancy

Cover Page Footnote
The author is indebted to comments of two anonymous referees.
Introduction

Purpose

Accounting education has responded little to changes in the business environment (Albrecht and Sack, 2000). Educators have been pressing for reforms in university accounting education, and one major objective has been to move away from the traditional instructional method that leads to passive learning, to other instructional methods that lead to active learning (Biggs, 2003). In response to the perceived need to facilitate active learning, the Accounting Education Change Commission (AECC) in the United States, in its position statement #1, addressed concerns about instructional methods in university accounting education. The AECC urged faculty members to move away from a purely traditional instructional method where students are passive recipients of information, so that students could become active participants in the learning process (AECC, 1990, p. 309).

As a part of a major study that investigated the accounting curriculum, in the context of a tertiary institution in Sri Lanka, this study poses two questions: (i) Do students prefer a particular instructional method for learning financial accounting, and (ii) Why do students prefer one instructional method over another? To address the first research question, the study used a 5-point Likert scale questionnaire, whereby students stated their relative preference for learning through the method of (a) traditional, (b) interactive, and (c) learning using case studies where students are formed into groups (group case-based learning), in learning financial accounting subjects in an undergraduate accounting program. The relative preference for each instructional method was analysed using non-parametric statistics. To address the second research question, the study analysed students’ optional written comments on the questionnaire, using themes.

There are salient differences among the three instructional methods. The traditional method gives students little opportunity to engage interactively with the subject matter (Gray, Bebbington, and McPhail, 1994). It is a teacher-dominated instructional method. The interactive method, on the other hand, allows students to interact with the teacher in two-way communication, asking questions and engaging in discussion. It is a teacher-dominated instructional method but it facilitates interaction between students and teacher. The group case-based instructional method divides students into groups and allows them to learn the subject through case studies with the teacher directing and facilitating learning, but with less emphasis on teacher-centred instruction, enabling students to engage in discussion with their peers. It is a student-dominated instructional method facilitating interaction with peers (Abeysekera, 2008).

Motivation

A study investigating instructional methods among domestic students and international students at an Australian University reported that international students preferred active instructional methods for learning intellectual capital as a new topic (Abeysekera, 2008). Acknowledging that different course-unit content poses dissimilar learning challenges to students, the current study uses the three instructional methods espoused in the Abeysekera study to investigate instructional method preferences for an established course unit in the accounting curriculum, financial accounting. Additionally, since it has been found that societal culture can influence student instructional method preference (Abeysekera, 2008; Hutchinson and Gul, 1997), conducting a study in a very different societal context helps us to explore relevance of the contextual effect on student preference for instructional methods.

A shift in emphasis from teaching to learning in the higher education sector has resulted in universities actively considering more efficient student instructional methods (Barr and Tagg, 1995; Broad, Matthews, and McDonald, 2004). Universities are major institutions of society facilitating economic and social change by providing opportunities for learning, and they are the leading institutions available today to respond to societal change. Most
countries, including developing countries such as Sri Lanka, have understood their human capital to be a primary asset, fostering economic, social, and cultural growth. From an economic perspective, countries have been transforming their economies to become knowledge-based to sustain economic competitive advantage (Benjamin, 2003). Hence, governments such as that of Sri Lanka tend to rely on universities as knowledge producers and disseminators to assist in strengthening the country’s human capital through improved learning and knowledge.

Three major factors motivated this exploration of the learning of university students in Sri Lanka. First, Sri Lanka has an unusually high adult literacy rate (92.5%) for a developing country (Central Bank of Sri Lanka Annual Report, 2005), which makes it an interesting sample from which to examine preferred instructional methods as a medium of learning in accounting higher education. Second, the recent focus of the Sri Lankan government on encouraging a knowledge economy has heightened the importance of tertiary education within the Sri Lankan context (BOI, 2000; McSheehy, 2001). Third, studies have hardly investigated the preferences of accounting students in developing countries for various instructional methods, and empirical evidence is required to confirm anecdotal assumptions about student instructional preferences in developing countries.

The section that follows describes the higher education sector in Sri Lanka, and section 3 provides a review of the literature. Section 4 outlines the theoretical framework, and section 5 the research methodology adopted, namely, the chi-square and Kruskal Wallis tests (quantitative), and thematic analysis (qualitative). Section 6 presents the results and discussion, with Section 7 providing concluding remarks.

**Higher Education in Sri Lanka**

**History**

For nearly 150 years, Sri Lanka was a British colony, and it inherited its accountancy education from the British (Wijewardena and Yapa, 1998). During most of the post-colonial period since gaining independence in 1948, Sri Lanka did not attempt to review its accounting education (Perera, 1975). However, several authors have pointed out that the British model was inadequate to meet the needs of the country (Manoharan, 1974; Perera, 1975).

Changes in the social, political, and economic arena over the years since independence culminated in a rethinking of the education system (Briston, 1978; Hove, 1986). The Bachelor and Master degrees offered by 12 Sri Lankan universities are regarded as of a similar academic standard to those obtained from developed countries (Central Bank of Sri Lanka Annual Report, 1998; Commonwealth of Australia, 1992, pp. 1-3). The low emphasis on technical skills relevant to the domestic and global job market has resulted in the production of an educated but often unemployable workforce (Presidential Task Force on General Education, Sri Lanka, 1997; Ul Haq and Haq, 1998; World Bank Group, 2003, p. 106). The universities in Sri Lanka undertook reforms to foster skill-focused learning while stimulating a balanced mental and physical growth of the individual (First Report of the National Education Commission, 1992; Presidential Task Force on General Education, Sri Lanka, 1997; Educational Reforms and Restructure, 1998).

**Accountancy education**

Although the Sri Lanka university system commenced in 1942, commerce as a discipline was introduced at the beginning of the 1960s, with a considerable number of accountancy subjects included in the discipline. In 1992, universities in Sri Lanka began to offer a comprehensive accountancy degree program, with a separate academic department for accounting. An important feature of the four-year accounting degree program in Sri Lanka is that students are required to complete a six-month accounting internship with an employer approved by the accountancy department (Wijewardena and Yapa, 1998). The internship program is integral in the degree program.
and counts as 12 credit points towards the total 120-credit point requirement to complete the degree, and is undertaken in the second semester of the third year and the first semester of the fourth year.

Upon graduation, students can enrol in professional accounting programs to become accredited accountants. The entry requirement to sit for professional accounting programs is the high school certificate, and accounting graduates receive exemptions from a number of subjects in the professional accounting programs. The professional accounting bodies conduct their own professional programs, the most popular two being the Institute of Chartered Accountants in Sri Lanka and the Chartered Institute of Management Accountants in the U.K. (CIMA Global Annual Report, 2005). Both accounting bodies require a minimum of three years of relevant work experience before awarding the membership after completion of professional examinations.

Pedagogy

Pedagogy in Sri Lanka assumes the traditional instructional method as the most preferred, for students’ learning experiences consistent with the societal culture. The Department of Accounting of this Sri Lankan university received World Bank funding, and a condition of funding required enhancing students’ instructional experience. Preliminary interviews with the head of the Department of Accounting and two senior academics in that department of the university confirmed that the accounting department practiced various instructional methods to achieve optimal learning outcomes for their students. The instructional methods most commonly used were traditional method, interactive method, and group case-based method.

Literature Review

Learning is a “relatively permanent change in the ability to exhibit a behaviour; this change occurs as a result of successful or unsuccessful experience” (Klein, 1987, p. 1). Students in higher education undertake learning for numerous reasons, and these reasons influence what they would like to learn and how they would like to learn in a given subject. For instance, Dolnicar (2004) found three major reasons for students attending lectures: to find out what they were supposed to learn, not to miss important information, and to find out about assessment tasks. From a motivational perspective, the two prototypical students are those genuinely enjoying lectures (“idealists”) and those attending lectures to succeed in the course units with highest grade point average (“pragmatists”). The composition between “idealists” and “pragmatists” differs across faculties, with “pragmatists” being represented most in the commerce faculty. Coxon, Jenkin, Marshall, and Massey (1994, p. 13) identified “pragmatists” as technocratic rationalists (or “instrumentalists”) who were more interested in learning to achieve an external goal. Ditcher and Hunter (2001) found that students in higher education, rather than being classified as “idealists” or “pragmatists,” balance both attributes as they have twin motivations in selecting course-units: to increase career opportunities and to pursue their genuine interests. Given that students often have dual motivations, it is realistic to help students to experience learning activities as meaningful and worthwhile, and offer their desired benefits (Brophy, 2010, p. 19).

Student learning and outcomes therefore are dependent on several factors, and the 3P model attempts to conceptualize this learning. The 3P model of learning was first outlined by Dunkin and Biddle (1974) and later elaborated by Biggs (2003) (Figure 1). Its three components are presage, process, and product. The presage component identifies two broad environmental factors: student context (i.e., prior knowledge of subject, abilities, motivation, and conception of learning) and teaching context (i.e., learning objectives, instructional methods, and institutional procedures). The process component refers to the cognitive processes applied for learning activities: active learning or passive learning approach. The product is the qualitative (i.e., structure and transfer), quantitative (i.e., facts and skills), and affective (i.e., involvement) learning outcomes. As this study investigates the instructional methods preferred by students and reasons for their choice, its focus is on the presage component,
more specifically on the teaching context (i.e., instructional methods), which can contribute to the process component as passive learning or active learning.

Figure 1: The contextualized Biggs’ 3P model

![Diagram of teaching context and learning process]

The traditional instructional method involves passive learning. The teachers consider it their responsibility to know the subject content well and explain it clearly. Teachers expect students to attend classes, take notes, and read study materials. Any differences in learning among students are attributable to their ability, motivation, and prior knowledge of subject matter. The interactive instructional method is also a transmitting activity. Although students take over the responsibility for learning from the teacher, the instruction remains teacher-centred. By contrast, the group case-based method is a form of collaborative learning in which the learning-focused activities of students are largely a result of their own perceptions and inputs (Panitz, 2004).

Both the interactive instructional method and the group case-based instructional method promote active learning. Bonwell and Eison (1991) describe active learning as instructional activities involving students in doing things and thinking about what they are doing. Active learning is a pedagogical approach that combines the learning efficiency with effectiveness of interaction for learning. It can be put into practice in large-class teaching in variety of ways and has been found to be effective in several university disciplines such as communications (Schwebel and Schwebel, 2002), biology (McClanahan and McClanahan 2002), mathematics (Inch, 2002), and music (Berry, 2008). The effectiveness of active learning has gained increasing importance in accounting education, with much evidence pointing to its value (Lindquist, 1995; Marcheggiani, Davis, and Sanders 1999; Apostolou, Watson, Hassell and Webber, 2001; Lancaster and Strand, 2001).

Studies conducted in developed countries confirm that modifications to the traditional instructional method bring better learning outcomes for students in higher education than does the traditional instructional method (Cook, 1997; Sawyer, Tomlinson, and Maples, 2000; Cook and Hazelwood, 2002). The inclusion of student interaction has resulted in increased student enjoyment, increased class participation, increased level of advanced preparation by students, and a more relaxed classroom atmosphere (Cook and Hazelwood, 2002). Bonwell and Eison (1991) have shown that active instructional methods are superior in developing student skills in thinking and writing, and conclude that a greater proportion of students prefer active instructional methods. Active instructional methods facilitate retention of concepts over time and prepare students better for future careers (Foyle, 1995; Price, 1995; Kane, 2004. p. 275; Stanley and Edwards, 2005).

Investigations of group instructional methods using case studies have reported that the group case-based instructional method helps students to improve communication, self-management, decision-making, problem solving, motivation, and interpersonal skills – benefits which are not offered by the traditional instructional method (Caldwell, Weishar, and Glezen, 1996; Greenstein and Hall, 1996; Sawyer et al., 2000). The evidence suggests that a group instructional method using case studies delivers better learning outcomes than does the traditional instructional method (Wintergerst, DeCapua, and Verna, 2003).
Abeysekera (2008) compared student instructional method preferences between domestic and international students in a large-class setting at an Australian university for an upcoming new topic: intellectual capital. The findings reported that students largely preferred the traditional instructional method (international students 68% and domestic students 58%), compared with the interactive instructional method (international students 36% and domestic students 27%), and the group case-based study instructional method (international students 34% and domestic students 18%). Although not explained in that study, the preference among students for the traditional instructional method might have been because intellectual capital is a new topic, and they anticipated maximum support from the teacher. Additionally, the study solicited student responses for a hypothetical topic they have not been exposed to, and for which they do not know the extent of help required from the teacher.

While seeking student opinion is an effective way to solicit their instructional preferences, obtaining feedback based on instructional methods they have experienced in a course unit can provide results more applicable to a classroom setting. As noted earlier, several studies conducted in small-class settings have reported that interactive, group case-based instructional methods are effective in enhancing the cognitive processes and learning outcomes for established course units in the curriculum. Although Abeysekera’s (2008) study was with large classes, the research conducted in these studies took place in societal cultures where students experience less ‘authoritative’ distance from the teacher, and where students are willing to experience new ways to learning.

**Theoretical Background**

**Societal culture for instructional methods**

Several studies in accounting education have applied Hofstede’s (1986) concept of societal power distance (Hofstede, 1986; Smith, Dugan, and Trompenaars, 1996; Williams and Seaman, 2004). A high power distance score indicates that students accept inequities of power relations between teacher and student, and students expect the teacher, as the more knowledgeable person, to teach. Although Hofstede has not reported cultural dimensions for Sri Lanka, the neighbouring country India, which has much cultural influence in Sri Lanka, has a significantly higher power distance (power distance score is 77) than countries with a more Anglo-Saxon cultural orientation (examples of power distance scores are Australia 36, Canada 39, U.K. 35, and U.S. 40). Hofstede’s uncertainty avoidance dimension identifies students in strong uncertainty avoidance societies such as Asia as being more comfortable in structured learning situations, expecting the teacher, as the more knowledgeable person, to teach (Hofstede, 1986). The evidence that the achievement of Asian cultures is collective in nature lends support for their society-based preference for learning being through more knowledgeable peers in groups (Hutchinson and Gul, 1997; Kember, 2000). Unclear from studies so far is the instructional format preferred by students for scaffolding with the more knowledgeable person. Hence rather than hypothesizing, this study states the propositions as research questions.

**Research questions**

Quantitative analysis was used to examine the first research question: Do students prefer an instructional method? Qualitative analysis was used to examine the second research question: Why do students prefer one instructional method to another?

Several studies have examined gender differences for student learning outcomes, and have obtained mixed results (Ballantine, Duff and Larres, 2008; Brophy, 2010, p. 291; Hall, Ramsay, and Raven, 2004). The influence of gender, student age, work-status (working student or not), enrolment status (full-time or part-time), and student year (third or fourth year) on instructional methods are not established. Several studies have confirmed that the overall GPA (grade point average) is a significant predictor of examination scores.
(Harnett, Romcke, and Yap, 2004; Tickell and Smyrnios, 2005), but it has not been demonstrated as a predictor for preferences in learning methods.

**Research Methods**

**Data collection**

Abeysekera (2008) asked students three questions relating to their preference for traditional, interactive, and group case-based instructional format and obtained responses to a survey questionnaire on a 5-point Likert scale. This study adopted a similar format and approach. Participants in this study were undergraduate students in the third and fourth (final) years at a metropolitan university in Sri Lanka, chosen because they had prior exposure to the three instructional formats (traditional, interactive, and group case-based study) in their previous financial accounting course units.

A sample of recent graduates, academic staff, and junior undergraduate students tested the clarity of questions, and corrected any anomalies to their satisfaction to achieve internal consistency of questions before the questionnaire was administered. Two separate large teaching classes for third-year and fourth-year students separately and simultaneously completed the responses to the survey questionnaire. The total number of students was 139, comprising 49 third-year students and 90 fourth-year students in the Bachelor of Commerce accounting program. Seventy-one percent of all enrolled students took part in the study, voluntarily.

Prior to administering the questionnaire, the researcher explained the confidentiality of information provided by students and their rights to the confidentiality being upheld, informing them that any published information would be anonymous. The questionnaire inquired as to students’ preferred instructional method in financial accounting in the undergraduate accounting program: traditional, interactive, and group case-based study. Participants received a verbal explanation of the meanings of traditional, interactive, and group case-based study instructional formats, and the introductory sheet of the questionnaire had a written explanation. In preparing participants for the survey, the survey administrator asked participants to assume that every other factor (such as whiteboard usage) was the same for all three instructional methods, and to avoid the assessment criteria influencing the responses, survey administrator told students that all courses would have a final examination only. The survey administrator answered any other questions participants had before administering the questionnaire.

**Data analysis**

With a view to ascertaining student preferences for instructional methods, and reasons for their preferred choice, the study combined two methods. First, the questionnaire responses were analysed quantitatively to examine any differences in students’ preferred instructional methods for learning. Second, optional comments made in relation to their preferred choice of instructional method were analysed qualitatively. According to Biggs (2003), the level of active learning increases as students attempt to move from the memorizing stage to the theorizing stage. The level of student activity from passive (evident in traditional instructional method) to active (evident in the interactive instructional method and in the group case-based instructional method) increases students’ capacity to engage in active learning. Active learning increases from memorizing to note-taking, describing, explaining, relating, applying, and theorizing in ascending order. This study used these categories as themes exploring students’ reasons for their preferred choice of instructional method.
Results and Discussion

Research question 1: Do students prefer an instructional method for learning?

The Kolmogorov-Smirnov test is one of most useful tests in non-parametric statistics to compare samples. This study compares them here the instructional methods (as three samples) obtained from questionnaire responses. The Kolmogorov-Smirnov test statistics were .189 (p < .0001) for the traditional instructional method, .257 (p < .0001) for the interactive instructional method, and .258 (p < .0001) for the group case-based instructional method, indicating that each instructional method rejected the test of normality, and hence this study resorted to non-parametric tests. Results were first analysed using the Mauchly’s test of sphericity, that tests whether the variances of three instructional samples are equal, indicating that the correlations among the three instructional methods were unequal (Mauchly’s W = .886, df = 2, p < .0001). Friedman’s test that compares differences between three or more related samples (in this instance, they are the three instructional methods) confirmed the differences in preference for instructional methods (traditional method 1.54, interactive method 2.5, and group case-based instructional method 1.96, at p < 0.0001) were significantly different. The summary statistics indicate that more than one-half of participants preferred the interactive and group case-based instructional methods (Table 1).

Table 1
Summary statistics for the questionnaire response

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional instructional method (based on 1-to-5 scale)</td>
<td>2.80</td>
<td>3</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Interactive instructional method (based on 1-to-5 scale)</td>
<td>4.32</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Group case-based instructional method (based on 1-to-5 scale)</td>
<td>3.53</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Age (years)</td>
<td>23.7</td>
<td>23</td>
<td>23</td>
<td>28</td>
</tr>
<tr>
<td>Grade point average (GPA)</td>
<td>2.709</td>
<td>2.5</td>
<td>1.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Categorical variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio of female to male participants</td>
<td>0.388</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio of non-working to working participants</td>
<td>0.655</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio of part-time to full-time participants</td>
<td>0.554</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For those who preferred the interactive instructional method it appeared to be a strong preference. Most participants had similar grade point average scores. The majority of participants were 23 years of age. Most of the participants were female, and a greater proportion of participants were in employment. There was a balanced mix of full-time and part-time students.

Data were then analysed using chi-square distribution, assuming an equal distribution of responses with the observed distribution of responses for each instructional method. Table 2 provides an analysis of the distribution of preferences for each instructional method and the statistical summary.
As demonstrated in Table 2, participants did not generally have a strong preference for the traditional instructional method. They tended to strongly prefer the interactive instructional method, which very few students disliked. Participants also preferred the group case-based instructional method, but to a lesser extent than the interactive instructional method. Fewer participants disliked the interactive instructional method compared to the group case-based instructional method.

Table 2
Distribution of participant preferences for each instructional method

<table>
<thead>
<tr>
<th>Instructional method</th>
<th>Observed N</th>
<th>Expected N</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traditional instructional method</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly dislike</td>
<td>30</td>
<td>27.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Dislike</td>
<td>30</td>
<td>27.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Neutral</td>
<td>31</td>
<td>27.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Like</td>
<td>34</td>
<td>27.8</td>
<td>6.2</td>
</tr>
<tr>
<td>Strongly like</td>
<td>14</td>
<td>27.8</td>
<td>-13.8</td>
</tr>
<tr>
<td>Total</td>
<td>139</td>
<td>139</td>
<td></td>
</tr>
<tr>
<td><strong>Interactive instructional method</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly dislike</td>
<td>1</td>
<td>27.8</td>
<td>-26.8</td>
</tr>
<tr>
<td>Dislike</td>
<td>5</td>
<td>27.8</td>
<td>-22.8</td>
</tr>
<tr>
<td>Neutral</td>
<td>8</td>
<td>27.8</td>
<td>-19.8</td>
</tr>
<tr>
<td>Like</td>
<td>60</td>
<td>27.8</td>
<td>32.2</td>
</tr>
<tr>
<td>Strongly like</td>
<td>65</td>
<td>27.8</td>
<td>37.2</td>
</tr>
<tr>
<td>Total</td>
<td>139</td>
<td>139</td>
<td></td>
</tr>
<tr>
<td><strong>Group case-based instructional method</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly dislike</td>
<td>13</td>
<td>27.8</td>
<td>-14.8</td>
</tr>
<tr>
<td>Dislike</td>
<td>19</td>
<td>27.8</td>
<td>-8.8</td>
</tr>
<tr>
<td>Neutral</td>
<td>26</td>
<td>27.8</td>
<td>-1.8</td>
</tr>
<tr>
<td>Like</td>
<td>44</td>
<td>27.8</td>
<td>16.2</td>
</tr>
<tr>
<td>Strongly like</td>
<td>37</td>
<td>27.8</td>
<td>9.2</td>
</tr>
<tr>
<td>Total</td>
<td>139</td>
<td>139</td>
<td></td>
</tr>
</tbody>
</table>

The Kruskal-Wallis test examined the significance of participant characteristics (age, gender, enrolment status, work status, year of study, and GPA) for each instructional method. Further, the data collected for each instructional method were ordinal data. Hence this study used the Kruskal-Wallis test to examine whether participants' preference for each instructional method was significantly influenced by participant characteristics. Table 3 summarizes the results. Unlike in previous studies cited in the literature, participant characteristics did not significantly influence their preference for instructional method.
Table 3
Kruskal Wallis test results (p value) for each instructional method – Financial accounting subject area

<table>
<thead>
<tr>
<th>Instructional method</th>
<th>Gender</th>
<th>Working/non-working</th>
<th>Full-time/part-time</th>
<th>3rd year / 4th year</th>
<th>Age</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional</td>
<td>2.179 (.140)</td>
<td>.806 (.060)</td>
<td>.234 (.628)</td>
<td>.323 (.127)</td>
<td>1.116 (.291)</td>
<td>4.29 (.513)</td>
</tr>
<tr>
<td>Interactive</td>
<td>.037 (.848)</td>
<td>.245 (.621)</td>
<td>.245 (.621)</td>
<td>1.291 (.256)</td>
<td>0.000 (.985)</td>
<td>.351 (.554)</td>
</tr>
<tr>
<td>Group case-based</td>
<td>.144 (.705)</td>
<td>.173 (.678)</td>
<td>.963 (.326)</td>
<td>2.178 (.140)</td>
<td>.004 (.948)</td>
<td>2.154 (.142)</td>
</tr>
</tbody>
</table>

Note:
P-value greater than (0.05) is not significant.
Gender category – male and female; Working status category – working and non-working; Enrolment status – full-time and part-time; Year of study – third year and fourth year.
The age and GPA were categorized into two categories using median as the cut-off point for Kruskal-Wallis test as follows: Age – below 24 years, and 24 years and over; GPA – less than 2.6, and above 2.6.

Research question 2: Why do participants prefer one instructional method to another?

This study applied thematic analysis to written comments made by participants about their instructional method preference. Thematic analysis is a method for identifying, analysing, and reporting patterns (themes) within data. It minimally organizes and describes the dataset in rich detail, frequently interpreting various aspects of the research topic (Boyatzis, 1998). The two themes used here were passive learning and active learning, applying Biggs’ (1993) analogy of level of active learning. In professional subjects such as financial accounting that usually involve a large amount of problem-solving activity, students learn a process that will be an essential part of their work as professionals. A passive learning approach is evident when students focus on specific isolated cues in solving a problem, linking them to arrive at a conclusion. An active learning approach is evident when students focus on establishing a complex chain of associations that link isolated cues for solving the problem to theoretical knowledge (Ramsden, 2003). Passive learning activities include students engaging in learning activities of memorizing, note taking, describing, and explaining. Active learning includes learning activities of relating, applying, and theorizing.

Although 139 participants responded to the survey questions, only 26 participants wrote usable comments about their choice of instructional method. Table 4 shows summary statistics of those who wrote comments. Comments provided by a few participants were relevant to more than one item of discussion and hence total comments analysed became 31. All variables were non-significant when means were compared (using unpaired t-test with unequal variances) between participants who responded to the questionnaire and those who wrote comments, except for work status and enrolment status of participants, which were marginally significant.

Passive learning

Only two participants commented about their preferred choice for traditional instructional method. They said it helped them to know the subject matter from the teacher so that they could memorize. One participant wrote, “I have poor English knowledge. I can’t understand quickly.”
Table 4
Descriptive statistics for the written comments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional instructional method (based on 1-to-5</td>
<td>2.557</td>
<td>2.5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Interactive instructional method (based on 1-to-5</td>
<td>4.462</td>
<td>4.5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Group case-based instructional method (based on 1-to-5</td>
<td>3.615</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Age (years)</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23.1</td>
</tr>
<tr>
<td>Grade point average (GPA)</td>
<td>2.5</td>
<td>2.5</td>
<td>1.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Categorical variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio of female to male participants</td>
<td>0.308</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio of non-working to working participants</td>
<td>0.461</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio of part-time to full-time participants</td>
<td>0.769</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Active learning

On the other hand, 18 participants offered reasons for preferring the interactive instructional method. The reasons included learning to apply financial accounting concepts in practice with the teacher (10 participants); opportunity to actively take part in discussion by asking questions in the class and clarifying doubts, thereby making a difficult subject easy to understand (6); developing skills relating to other assessment tasks such as presentations (1); and supplementing learning as there were insufficient books in the library to resolve learning difficulties (1). These participants believed that the teacher knew most about the subject and therefore was in a better position to simplify difficult concepts. Participants’ preferring the interactive instructional method liked the fact that they could interact with their teacher and bridge any gaps in understanding effectively. For instance, a participant wrote, “Students must have time to solve some problems in the class and there should be time to discuss with the teacher to clear problem areas.” Another participant wrote, “Financial accounting is a mathematical subject. Therefore, I would like to get my mind quickly into it, take part in asking and answering questions [from the teacher].” Another wrote, “As far as financial accounting is concerned there are some technical matters that students have to clarify. Therefore [the] interactive method is good.”

Twelve participants offered reasons for their preference for the group case-based instructional method, many of which overlapped with reasons offered by other participants who preferred the interactive instructional method. Participants thought that learning to apply concepts in practice (8 participants), and using the opportunity to actively take part in resolving learning problems (1) were best done through discussion with peers. One participant mentioned that the group method improved team spirit among peers for learning, and another thought it provided an opportunity to share knowledge among the peers. Participants liked the use of case studies for learning. A participant wrote, “The student should be given a chance to answer any question relating to the topic and case studies help the student to understand to think about different aspects of theory.”
Concluding Remarks

Participants differed in their preferred choices for scaffolding, although instructional methods that provided active learning were overwhelmingly the most preferred. Several participant characteristics, such as GPA, gender, working experience, and enrolment status were found to have no effect on participants’ preferred instructional method. Further, participants had a desire to engage in active learning. The majority of participants who wrote comments thought that the attributes in the active learning process were more useful for their learning. The outcomes they wanted to achieve were applying concepts and relating them to practice in the real world. This is consistent with previous studies indicating that education is seen as a means towards an end, rather than being considered as valuable in its own right (Coxon et al., 1994; Ditcher and Hunter, 2001; Dolnicar, 2004). They predominantly preferred the interactive instructional method, followed by the group case-based instructional method, because these methods helped them to attain greater understanding of the subject through interaction with the teacher or peers. More participants preferred the interactive instructional method as they thought that the teacher was the best more knowledgeable person in a position to resolve their cognitive difficulties.

The most obvious limitation of this study lies in the potential to generalize the findings, as it was a cross-sectional study in a single tertiary institution. Country-specific factors such as societal culture may have had an influence on the participants’ preferred instructional methods. The limited number of participants’ written comments may reduce the relevance of the reasons provided for their preferred instructional method to the study sample. The fact that a greater proportion of participants who were not working or who were working full-time than in the sample population who provided reasons for their preferred choice, and this also may reduce relevance of their comments to the study sample.

An important conclusion of this study is how little is known about instructional methods of university accounting students in developing countries. Although instructional methods offering active learning were the most preferred choice, their applicability in developing countries with different societal cultures needs further exploration in future. This study did not investigate positive peer pressure, or rewards through assessment procedures for learning outcomes for preferred instructional methods, which are fruitful aspects for future investigation. This study investigated the opinions of participants in relation to instructional methods, and a future study could investigate whether students confirmed their opinion after implementation of their preferred choice for effective learning.

References


