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Student Preferences for Instructional Methods in an Accounting Curriculum

Indra Abeysekera
CQUniversity Sydney, Australia

Student preferences among instructional methods are largely unexplored across the accounting curriculum. The algorithmic rigor of courses and the societal culture can influence these preferences. This study explored students' preferences of instructional methods for learning in six courses of the accounting curriculum that differ in algorithmic pedagogy. One hundred and thirty-nine accounting students attending a major Sri Lankan university took part in the study. For six courses in the curriculum, the study investigated students' preferences of traditional, interactive, and case-study-based group instructional methods. Students least preferred the traditional instructional method across all courses. Students most preferred the interactive instructional method in high algorithmic courses. In the two low algorithmic courses, students most preferred the case-study-based group instructional method in the management course and the interactive and case-study-based group instructional methods in the business law course. The implications are outlined for an algorithmic pedagogy such as an accounting curriculum.

Change in the future of higher education is influenced by the massive increase in the availability of knowledge, competition for students and government funding, digital technology, mobility of students and academics, and the building of deeper relationships with industry to differentiate teaching programs (EY, 2014). In relation to accounting, the Pathways Commission on Accounting for Higher Education, created by the American Accounting Association and the American Institute of Certified Public Accountants, noted that more needs to be done to engage and retain the strongest possible community of students in the study of accounting (Pathways Commission, 2012, p. 9). Consistent with that vision, this study explored students' preferred instructional methods for learning in an undergraduate accounting degree program across six core courses that demanded different levels of algorithmic rigor. The three instructional methods investigated were traditional, interactive, and case-study-based group.

There were three motivations behind undertaking this study. First, accounting is an algorithmic pedagogy in which the algorithmic rigor varies across courses in the curriculum. Galloway described algorithm metaphorically as "a machine for the motion of parts" (Galloway 2006, p. xi). Wark (2006) and Narayan (2009) approach an algorithm linearly. Wark described it as a finite set of instructions to accomplish some task which transforms an initial starting condition into a recognizable end condition (Wark, 2006, section 31). Narayan described it as a step-by-step breaking down of procedures for a given computational task to facilitate student learning. However, there is little evidence for us to understand which instructional method is most preferred by students for learning courses that have different algorithmic rigor. Second, studies have examined student-preferred instructional methods at a course level rather than across the curriculum (Abeysekera, 2008, 2011). Understanding student-preferred instructional methods across the curriculum enables policymakers to design the delivery of course content in a student-centered way. Third, some have anecdotally concluded that in societies with greater power distance such as Sri Lanka, students most prefer the traditional instructional method. Most Asian countries share the greater power distance as a common societal dimension, and empirical evidence from an Asian context can shed light on the instructional methods commonly preferred by students in accounting curricula in that context.

To explore the stated aim in this study, the next section outlines the relevant literature. Section three presents the theoretical approach and develops hypotheses. The research method and data analysis technique are explained in section four. Section five presents empirical results and discussion. The final section concludes with the implications of findings, limitations of the study, and future research propositions.

Relevant Literature

Contemporary Challenges in Accounting Education

Albrecht and Sack (2000) identified a set of unequal attributes that make accounting students competent. Those ranked most highly by accounting students, practitioners, and academics included written communications, oral communications, analytical and critical thinking skills, decision making, interpersonal skills, teamwork, computer technology, and leadership. Albrecht and Sack urged revision of instructional methods and curriculum in higher education to develop the skill set required in future accountants. A path to facilitating competence in students is to enable them with instructional methods that allow students to build competence through acquiring knowledge, applying knowledge, and gaining insights.

Students' Perceptions on Instructional Methods

The instructional methods help the learning process to connect conceptual knowledge to a meaningful professional practice (Ramsden, 2003, p. 50). Picciano (2002) examined student interaction in an online course in a graduate program in education administration. The author found that student interaction (measured as postings on an online discussion board) positively influenced examination performance in that course (measured as scores on an examination and on a written assignment). Students' perceptions of various aspects of learning have been examined across academic disciplines such as information technology (Smart & Cappel, 2006), foreign language (Stepp-Greany, 2002), and accounting (Zraa, Kavanagh, & Morgan, 2012). Studies have also examined student perceptions of effective instructional methods in different delivery platforms such as distance education (Egan, Welch, Page, & Sebastian, 1992), online education (Potter & Johnston, 2006; Smart & Cappel, 2006), and face-to-face education (Zraa et al., 2012).

Centra and Gaubatz (2005) note that examination scores relating to learning outcomes provide a limited view about student learning. For instance, Abeysekera (2013) reported that students' enhanced critical thinking skills can have an influence on final examination performance in a financial accounting course, but such a relationship speaks for the influence of isolated factors (example, critical thinking skills) on student learning. Centra and Gaubatz (2005) state that examining student perceptions can bring out more aspects about learning not considered by examination-based assessments. These include students' increased interest in interpersonal skills, intrapersonal skills, and critical thinking skills. Analyzing eight academic disciplines—health, business, education, social sciences, fine arts, natural sciences, technology, and humanities—they found that instructional methods contributed differently to student learning. Ferguson (2010) found that differences in instructional method variously influenced learning in different courses. In the English Language and Arts courses students most preferred instructors seeking their viewpoint, asking them questions, and inviting them to answer. In mathematics courses students most preferred the instructors rigorously asking questions to elicit deeper and thorough reasoning from them.

Zraa et al. (2012) examined students' perceptions about feeling empowered in relation to classroom instructional methods with first-year Libyan and Australian students undertaking a business degree program. They assumed the 247 Libyan students in their study were instructed using the traditional method in Libyan tertiary institutions, but separately identified 83 students learning under the traditional method of instruction, and 78 students learning under a collaborative method of instruction in Australian tertiary institutions. They found that students perceived the collaborative instructional method empowered them to make an impact on how learning was conducted in the classroom, to make learning more meaningful, and to be more competent in their learning tasks.

Students' Preference of Instructional Methods

There are various ways to classify instructional methods for learning. Two broad classifications are the teacher-centered instructional approach (traditional instructional method) and the learner-centered instructional approach. The learner-centered instructional approach includes learning through discussion, cooperative learning, and team-based learning. The teacher-centered instructional approach focuses on how students are taught with attention to *what* students learn, while by contrast learner-centered instructional methods are taught with attention to *how* students learn (Kramer et al., 2007).

Rather than classifying instructional methods as teacher-centered and student-centered approaches, literature has also classified instructional methods as traditional, interactive, and case-study-based group, where the teacher-centered instructional approach is traditional, the learner-centered instructional approach is case-study-based group, and the 'hybrid' instructional method is interactive. However, there are salient differences among the three instructional methods investigated. The traditional instructional method offers students little opportunity to engage interactively with the course content (Gray, Bebbington, & McPhail, 1994) and is a teacher-dominated instructional method. The interactive method, on the other hand, allows students to interact with the instructor in two-way communication, asking questions and engaging in discussion. It is a teacher-dominated instructional method, but it facilitates interaction between the students and the instructor. The case-study-based group instructional method divides students into groups and allows them to learn the course content through case studies with the instructor directing and facilitating the learning. In this method there is less emphasis on instructor-centered instruction and more emphasis on students engaging in discussion with their peers. Thus, it is a student-dominated instructional method that facilitates interaction with peers (Apostolou, Hassell, Rebele, & Watson, 2010).

Instructional Methods as a Product of Learning Environment

Students in various academic disciplines study differently (Ramsden & Entwistle, 1981), and this study

examines learning in an accountancy curriculum. Regardless of the academic discipline, good teaching is student-centered (Carpenter & Tait, 2001), but this does not imply that bad teaching is teacher-centered. For instance, Fogarty (2010) argues that education is largely formed by expectations. Students enter into education with strong ideas about what they want and wish to receive rather than with a template an instructor is required to complete. Sangster (2010) pointed out that what needs to be learned in accounting is greatly influenced by external factors such as the accounting profession, but what should be learned can be influenced by the instructional method. The appropriate instructional method can help to increase student learning in a given course. Trigwell, Prosser, and Waterhouse (1999) showed that good teaching involves matching students' learning approaches with appropriate instructional methods.

A study conducted with accounting students at a major Hong Kong university revealed that those students learned as spectators rather than as participants, and it concluded that the learning process is a product of the learning environment (Hwang, Lui, & Tong, 2005, 2008). The learning environment is largely determined by its societal cultural setting, and the authors identified Hong Kong as being representative of Asian societal cultures measured using Hofstede's (1980) societal culture dimensions, characterized by a greater power distance. The greater power distance between the instructor and students diminished student participation in the learning process and was considered more conducive to passive, rather than active, learning. The authors also noted that the society's cultural setting might have caused an inherent resistance to the introduction of alternative instructional methods by the instructors, and that the instructors' adopting the traditional instructional method was consistent with Hong Kong's societal cultural setting.

This study undertook an experimental investigation into students' preferred instructional methods (traditional, interactive, and case-study based group) in six algorithmically different courses in the accounting curriculum of a large Sri Lankan university. Since accounting curricula comprise courses that differ in algorithmic rigor, such investigation could provide valuable information regarding students' preferences of instructional method for courses across an accounting curriculum.

Algorithmic Pedagogy and Likely Student Preferences of Instructional Methods

Rules of academic discourse differ between courses, and students explore various ways to understand these discourses (Hull & Rose, 1990). Thus, instructors need to understand the ways in which learners learn the rules of academic discourse in various courses in academic disciplines (Olivier-Shaw, 1995). Several studies examining single courses, or single topics, in Western tertiary institutions have created a "halo effect" assumption that student-to-student interaction is the most preferred to achieve best examination performance outcomes, equating those outcomes to student learning (Hwang et al., 2005, 2008; Johnson, 1981; Kerr & Murthy, 1994; Potter & Johnston, 2006).

Umapathy (1984) noted that courses in the accounting curriculum have wide variations in algorithmic rigor. Umapathy identified six attributes that make course content highly algorithmic: (1) the course content has procedural aspects; (2) the problems examined therein can be broken down into several components as procedures or decisions; (3) the concepts or theories to be learned can be generated by solving problems; (4) there is one correct solution to each problem; (5) the learning process can be standardized across all students and instructors; and (6) the material to be learned is high in the importance of accuracy and low in the importance of subjective factors.

Discussing algorithms in two courses in the accounting curriculum, Jackling (2005) explained that the focus of financial accounting courses is on following highly structured procedures for recording and reporting financial results of operations of organizations. The application of high algorithmic rigor in learning financial accounting enables students to logically understand the tasks involved, from classifying financial transactions to preparing financial data in organizations that must meet legislative and accounting regulatory requirements. On the other hand, management accounting courses have less structured procedures, do not necessarily follow a sequential process, and defy that high level of algorithmic rigor in learning.

Simon (1977) pointed out that every solution construction, whether it is structured, semi-structured, or unstructured, relies on algorithms. Using this premise, students learn to organize and rearrange numerical and/or non-numerical symbols. In solving problems, students can organize symbol-manipulation processes into orderly, complex sequences to respond to the task environment. The algorithms thus are the basic elements of the problem-solving structure: whether the problems are structured, semi-structured, or unstructured, they are commonly solved by developing algorithms (Simon, 1977).

Algorithmic pedagogy relies on two aspects: course learning content in terms of algorithmic rigor, and the use of appropriate instructional method. The instructional methods could differ in relation to the level and robustness of algorithm development in

learning demanded by students. Arguably, the interactive instructional method would offer the best pathway to develop algorithms in learning among students with the help of an instructor who has demonstrated competence in the application of algorithms. Using the interactive instructional method, instructors have ample time to design classroom activities with their students, as well as to overcome any misunderstandings while the concepts are still fresh in students' minds (Ongeri, 2009).

The Pathways Commission identified several challenges for the future of higher education in accounting, and using appropriate instructional methods can facilitate increased student learning and help meet those challenges. Previous studies have documented that instructional methods are a product of the learning environment (Abeysekera, 2008, 2011; Hwang et al., 2005, 2008). Evidence from societal cultures outside the Western setting is scarce, and so far this has narrowed our understanding about appropriate instructional methods. The fact that accounting involves algorithmic pedagogy has received less than its deserved attention. In this pedagogy, courses can have differing algorithmic rigor, and the algorithmic rigor can influence student instructional method preferences. If education is to be student centered, students should be consulted for their preferred instructional methods.

Hypothesis Development

Algorithms in Accounting

In consultation with the course coordinators and the head of the school of accounting, each of the six algorithmic pedagogical attributes suggested by Umapathy (1984) was evaluated for high, medium, or low rigor in each of the six courses (Table 1). Based on the analysis as shown in Table 1, financial accounting and business statistics are high on five attributes, finance is high on four attributes, management accounting is high on three attributes, and business law and management are high on one attribute only.

Assigning ordinal scale values as 3 for high, 2 for medium, and 1 for low, the financial accounting and business statistics courses received the highest algorithmic score of 17 points each. The finance course received 16 points, and the management accounting course received 15 points. The business law course received 10 points, and the management course received eight points. The median score was 15.5, and the management accounting course was thus closest to the median value. In common with the courses above median value, the management accounting course required students to learn the procedural aspects with a high degree of precision in solutions. Therefore, financial accounting, finance, business statistics, and management accounting courses were classified as high algorithmic rigor. Business law and management courses were classified as low algorithmic rigor.

Traditional lecturing involves no interaction with the instructor, and in the current study it is expected to be the least favored by students in courses with an algorithmic pedagogy because they must construct algorithms without any assistance. In courses where procedural steps are low, multiple solutions to a given problem are the norm, and inexact answers are tolerated, it is likely students will be ambivalent about whether knowledge is to be constructed by interacting with the instructor or with their peers.

Using Hofstede's (1980) cultural dimensions as a basis, Sri Lanka is a greater power distance society. The power distance index suggested for Sri Lanka is 80, which is much higher than the comparable index scores for countries such as Australia (36), the United States (40), and the United Kingdom (35) (Hofstede Centre, 2014). Given the societal greater power distance in Sri Lanka, it is likely that students would prefer to rely on the instructor in constructing algorithms. The power distance dimension also informs that less powerful individuals (for example, students) expect and accept the authority of the more powerful individuals (for example, instructors) in a given societal setting (for example, a tertiary educational setting). Thus, students would tend to revere the instructor as having a greater knowledge base to learn procedural information and arrive at exact answers. This study expects that, while culturally revering the instructor as having valuable knowledge to impart, students would choose the interactive teaching method as more useful than the traditional lecturing method for these courses. Opportunity for interaction with the instructor increases the transfer of knowledge. This study, therefore, expects that students would most prefer the interactive instructional method for courses. The following two hypotheses were stated:

- H1: Students most prefer the interactive instructional method to learn high algorithmic courses.
- H2: Students most prefer the interactive and case-study-based group instructional methods to learn low algorithmic courses.

Control Variables

Several studies have confirmed the relation between the overall GPA (grade-point average) and examination scores (Harnett, Romcke, & Yap, 2004; Tickell & Smyrnios, 2005), but not in relation to the students' instructional method preference. Several cross-sectional studies (Booth, Luckett, & Mladenovic, 1999; de Lange & Mavondo, 2004; Duff, 1999) and

Table 1
Attributes for Algorithmic Pedagogy for Courses in the Study

Attribute	Financial Accounting	Management Accounting	Finance	Management	Business Statistics	Business Law
Importance of procedural aspects	High	Medium	Medium	Low	High	Low
Breaking down a problem into several procedures	High	High	High	Low	High	Medium
Generating concepts through problem-solving	High	High	High	High	High	High
One solution to each problem	Medium	Medium	Medium	Low	Medium	Low
Learning process standardization	High	High	High	Low	High	Medium
Importance of accuracy factors	High	Medium	High	Low	High	Low

Note. Criteria suggested by Umapathy (1984)

longitudinal studies (Ballantine, Duff, & Larres, 2008; Hall, Ramsay, & Raven, 2004) have examined gender difference in relation to student learning outcomes and obtained mixed results. The current study included variables from the literature that may determine students' perceptions, for additional analysis: student age, work status (student in work-integrated learning or not), and enrollment status (full-time or part-time) to determine whether the students' preferences for instructional methods are statistically different above and beyond the determinants of these control variables. Table 2 outlines the proxy and measurement of variables.

Research Method

Experimental Design

The courses examined were from the third year of the accounting program. In planning to conduct the research, discussions held with the head of the school of accounting and several academic staff of the accounting department at the university confirmed that third- and fourth-year undergraduate students had experienced the three instructional methods and undertaken courses examined in this study. All courses had a final examination. Based on the course content, and guided by prior studies, this study selected courses in such a way that they differed in algorithmic pedagogy (see Table 2).

Task

Research on learning processes focuses on identifying ways of supporting learners. Studies have examined cognitive, affective, and behavior practices of learners in specific learning contexts. For the current study, the researcher constructed a questioning format for participants and pilot-tested it for clarity and appropriateness with a sample comprised of academic staff and recent graduates. It obtained responses from students for each of the three (i.e., traditional, interactive, and case-study-based group) instructional methods on a five-point Likert scale (strongly agree, agree, neutral, disagree, and strongly disagree). The responses for each course constituted one experiment, and there were thus six experiments for six courses investigated (Appendix).

Students were first given a cover sheet outlining the purpose of the study. It stated: "For the purpose of this study, traditional learning occurs when the teacher teaches the course content with no interaction with students in a two-hour lecture. Interactive learning occurs when the teacher teaches the course content with more interaction between students and the teacher in a two-hour lecture. Case-study-based group learning occurs when the teacher teaches the course content with minimal interaction with students, but students interact substantially with their peers and learn through case-study material in small groups of three to four in a two-hour lecture."

Students were informed that the statements about instructional methods were inquiring about six courses from their studies. In preparing participants for the experiments, the administrator of the experiments asked participants to assume that every other factor was the same for all three instructional methods across all courses. To avoid the assessment criteria influencing

Table 2
Variable Proxy and Measurement

Variable	Proxy	Measurement	Data source
Dependent			
Courses	Financial accounting (FA), management accounting (MA), finance (F), management (M), business studies (BS), business law (BL)	Five-point response score of 1 (strongly disagree) to 5 (strongly agree)	Questionnaire
Predictor			
Instructional method	Traditional method (TM), interactive method (IM), and case-study based group (GM)	TL=1, TM=2, and GM=3	Pre-defined from literature
Control			
Study year	Student year of study	Third year=0, fourth year=1	Questionnaire
Student cohort	The year in which study was conducted	2006=0, 2008=1	Questionnaire
GPA	Student grade-point average	Between 0 and 4	Questionnaire
Gender	Student gender	Female=0, male=1	Questionnaire
Work status	Student in work-integrated learning (WIL) program or otherwise	Non WIL students =0, WIL students=1	Questionnaire
Enrollment status	Student enrolled as full-time or otherwise	Part-time=0, full-time=1	Questionnaire

the responses, students were told that all courses would have a final examination only. The administrator of the experiments answered any other questions participants had before commencing the experiments, which were provided to the participants as seven separate sheets that followed the cover sheet.

Students were asked to record their preferences in relation to each of the three instructional methods for the course in question. Below these questions, a space was provided for any comments the participants might wish to write. Six separate sheets were prepared and given to students, and each sheet solicited students' preferences on instructional methods relating to a different course. Another sheet required them to record demographic information. Students were given these seven sheets (six for the courses and one demographic sheet) in a random order, to be completed in that sequence. As per the ethics agreement, the students were given written assurance that their participation in the study was voluntary and that their anonymity would be maintained. The research was conducted in 2006. The experiments were conducted on the same day, prior to an evening lecture for both third- and fourth-year students.

Students as Participants

One hundred and thirty-nine students participated; 54 (39%) students were male, and 85 (61%) were female. The overall GPA of the students was 3.65 (*SD* = 0.79). The average age of the students was 23.7 (*SD* = 1.7). Ninety (65%) were fourth-year students, and 49 (35%) were third-year students. Ninety-one students were employed (65%), and 48 students were not (35%). Sixty-two students (45%) were enrolled full-time, and 77 (55%) were enrolled part-time.

Data Analysis Technique

This study meets normality assumptions of response scores of preferred instructional methods, and therefore the results are interpreted using a 95% confidence interval (Glass, Peckham, & Sanders 1972; Hsu & Feldt., 1969). Response scores were obtained (SA=5, A=4, N=3, D=2, SD=1) from experiments relating to students' preferences for the three instructional methods for each course, and they were analyzed using multivariate analysis of variance (MANOVA) to verify whether students' preferences relating to the three instructional

methods were statistically different across the six courses in the curriculum.

Results

Table 3 reports the strength of the association (Partial η2) between instructional methods and each given course in the multivariate statistics. All multivariate statistics associated with the instructional method were statistically significant at $p<0.001$, and not significant for control variables. The effect size between instructional methods and each course is large.

This study used the MANOVA procedure to test for the differences in means among the three instructional methods. MANOVA works well when the dependent variables are moderately correlated (correlation matrix is not reported here). The study tested for the assumptions made in MANOVA about dependent variables. A check on linearity of relationships showed the skewness results were within the acceptable range. The scatterplot matrix visually confirmed the absence of outliers. Although Box test is disregarded when sample size is equal, the sample size was indicative of the multivariate normality. Because the Levine's test of homogeneity of variances was significant, the Pillai's trace statistics were used as the most robust statistic to infer statistical significance at the one percent level (Tabachick & Field, 2001, p. 80). The MANOVA results showed that the Pillai's trace (P) (F value=4.14) was significant at one percent of the overall model. The MANOVA results also showed that the Pillai's trace (P) (F value=22.14) was significant at the one percent level of the instructional method. The control variables were not significant.

Results for Hypothesis One: High Algorithmic Courses and Instructional Method Preferences

Since MANOVA does not show which instructional method is most preferred by students for each given course, this study conducted a post-hoc MANOVA test to identify which instructional methods are statistically different at the one percent significance level by contrasting two instructional methods at a given time, and summarized the comparison (see furthest right column in Table 3, the inequality column).

The negative significant sign of TM versus IM indicates that students preferred the interactive instructional method over the traditional instructional method in all courses. The positive significant sign of IM versus GM in financial accounting (0.794), business statistics (0.873), finance (0.541), and management accounting (0.462) indicates that students preferred the interactive instructional method over the case-study-based group instructional method. This satisfies H1 where students most preferred the interactive instructional method to learn high algorithmic courses.

Results for Hypothesis Two: Low Algorithmic Courses and Instructional Method Preferences

Results from post-hoc MANOVA test to identify which instructional methods are statistically different at one percent significance level show that the business law course satisfies H2 where students preferred the interactive and case-study-based group instructional methods. However, results from the management course only partially satisfy H2 because students most preferred the case-study-based instructional method over the interactive instructional method.

Although the IM versus GM coefficient was positive (0.239), it was not significant in the business law course, where students showed no clear preference between the interactive instructional method and the case-study-based group instructional method. The IM versus GM coefficient was negative and significant in the management course (-0.351), indicating that students most preferred the case-study-based group instructional method for that course. Therefore, H2 is partially supported.

Although gender, GPA, study year, working status, and enrolment status are variables found to statistically influence examination performance, they had no statistical influence in student preferences of instructional methods.

Conclusions

This study found that students preferred to obtain conceptual and application knowledge by interacting with the instructor (interactive instructional method) rather than merely receiving this knowledge from the instructor (traditional instructional method) in high algorithmic courses. Students intentionally chose the freedom to rely on the instructor to impart procedural steps to arrive at single solutions with precision.

The findings of this study are pertinent for three reasons. First, the study was conducted at a Sri Lankan university and thus adds to the broader understanding of students' preferred instructional methods across different courses in an accounting curriculum in a greater power-distance society and a large class setting. In a greater power-distance society such as Sri Lanka, students are likely to revere instructors more than in a lower-power-distance society. Second, the study found that the students preferred the interactive instructional method for the courses with high algorithmic rigor. It is likely that students most prefer to model instructors' knowledge, as well as that instructors or peers becoming involved in resolving issues serves to facilitate students' greater understanding of the content

Table 3
Univariate Statistics Associated with MANOVA for the Instructional Method (N = 417)

Instructional method	TM		IM		GM				
Dependent variable	Mean	Std. error	Mean	Std. error	Mean	Std. error	F (df, n-2)	Partial η2	Inequality
Financial accounting	2.80	1.30	4.32	0.80	3.53	1.28	15.40	0.23	IM>GM>TIM
Business statistics	2.85	1.40	4.25	0.98	3.78	1.13	10.62	0.17	IM>GM>TIM
Finance	2.86	1.41	4.05	1.02	3.53	1.26	8.09	0.14	IM>GM>TIM
Management accounting	2.75	1.31	4.08	1.10	4.45	0.85	12.52	0.20	IM>GM>TIM
Business law	2.90	1.53	4.27	0.93	3.40	1.31	6.00	0.11	IM, GM>TIM
Management	3.15	1.41	4.13	1.13	3.88	1.18	23.20	0.31	GM>IM>TIM

of these courses. Third, students least preferred the traditional instructional method regardless of the course algorithmic rigor due to the least involvement of instructors in resolving learning issues relating to course content. The findings of this study can have implications for other curricula such as engineering and finance that contain courses with differing algorithmic rigor. Future research can engage in such inquiry.

The findings should, however, be considered in the context of several limitations encountered. First, this study was conducted at a single tertiary institution at one time interval, and generalizing findings to other tertiary institutions requires future empirical validation. The experimental setting makes findings strong in interval validity, but not in external validity. For instance, the experimental setting manipulated the instructional methods separately, but in practice these instructional methods can be used concurrently. Second, it examined six courses in the accounting curriculum, and expanding the number of courses in future experiments would assist in further broadening findings across a wider set of courses in the curriculum. Third, in a small class setting, cooperative learning as an instructional method can become appropriate because it provides an opportunity for students to exercise their metacognitive learning, which is essential to empower reasoning skills (Johnson, 1981). The purpose of this study was to investigate the extent to which students prefer instructional methods rather than why they prefer them, and a future study can investigate the reasons behind such selection. For instance, in one learning context, students may compete with each other for interactive instruction to obtain better praise and grades from the instructor. In another learning context, students may feel positively interdependent to help their group members to enhance learning. A future study could also investigate whether these student preferences for instructional method translate into planned educational outcomes (such as exam scores) and students' themed learning (such as critical thinking skills). The outcomes from such implementation could then serve as feedback, leading to further refinements of the students' preferred instructional methods.

Despite these limitations, the findings are consistent with those of the Abeysekera (2008, 2011) and Hwang et al. (2005, 2008) studies that reported active instructional methods to be the students' preferred choice, although there existed the possibility that students might prefer the traditional instructional method because of the societal cultural setting (Hwang et al., 2005, 2008). Results show that, to the contrary, these students most prefer the interactive instructional method in learning courses that have high algorithmic rigor. The cultural setting with greater power distance was found to be conducive to the interactive instructional method, with the instructor becoming the revered expert in facilitating algorithmic rigor for the students.

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INDRA ABEYSEKERA is Professor of Accounting and Finance at CQUniversity Sydney, Australia. One strand of his research is in accounting education and includes the use of technology, critical thinking, and examination performance. Other research interests include integrated reporting, intellectual capital, earnings quality, and reporting transparency.