

Technology vs. Traditional Teaching in Accounting Education: A Case Study from Fiji National University

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Abstract

The use of ICT has increased rapidly in the education sector. This paper looks at the views of accounting students at a Fijian University on technology-based and traditional methods of teaching accounting. Some challenges which students identified are also noted.

Introduction

Students now have immense access to technology. The use of Facebook and YouTube has significantly influenced use of technology amongst youngsters. ICT is used by students for a number of purposes, including education and learning. Teachers also have been increasingly relying on technology to make their teaching easy, effective and interesting. Technology can provide a virtual classroom facility for the students and teachers alike. Access to information has become as quick as a click. Never before has such a volume of information been so rapidly made available publicly. For education, such information saves time and efforts of students and teachers, and facilitates their learning. But these may also detract students from learning and pull them into cycles of additive entertainment and make-believe mind games.

The influence of ICT on Accounting education is similar to its influence in all other areas of education. Without access to technology accounting students would lose enormous opportunities to upgrade their professional skills and engage in intellectual pursuits. The big challenge before accounting education providers is the extent to which they could move from traditional education methods to use of modern technology at different levels, for example, secondary schools, undergraduate levels, and post-graduate levels. The rapidly evolving nature of the accounting

job market is also a critical matter for their consideration (Riccio, 1998).

The search for quality accounting learning has become a prime consideration for the higher education institutions in Fiji. This paper deals with traditional and technology based (also called 'modern') teaching utilised in enhancing the quality of accounting education. While accounting education in Fiji's secondary schools is still predominantly blackboard/whiteboard based (traditional teaching technology), universities have rapidly moved to use modern technology, alongside traditional classroom teaching. Now such technologies as Moodle, Turnitin, online library resources, etc., are part of University necessities. The use of technology in teaching methods make an enormous difference in learning outcomes as expected (Boumova, 2008).

But researchers believe that making a definitive conclusion on the effectiveness of learning outcomes may be too early. Almost 40 years ago, Henson (1980) suggested that traditional and modern methods both had the potential of transferring knowledge effectively. Thirty years ago Michael Wallace (1991) suggested that a student's learning needs and character are the main factors which must determine the choice of learning methods; what may work for one student may not necessarily work for another. How rapidly a student can grasp class content is one critical matter. The speed at which an accounting teacher is covering the subject matter might differ from a uniform package which a student can get via computer mediated learning where the student has the freedom to control the speed at which he/she wishes to progress through the learning (Chiu & Linn, 2012). Even the perceptions of students of their learning needs towards accounting education, and their charm towards technology based vis-a-vis traditional teaching instructions are important considerations. Dunkin (1984) examined at least 20 studies pertaining to evaluation of teaching instructions or methods, and identified evidences of student sensibilities to the variation in teaching methods, arguing that there are evidences confirming that teaching instructions vary in size due to their effects upon students' evaluation.

It ultimately becomes the responsibility of the teachers, tutors and lecturers to create a teaching environment that enables the students to attain quality understanding suiting their needs. However, it also cannot be ignored that there are numerous other factors influencing the educators in their choice of resources and methods to be used in classes - such as associated costs, knowledge of the teaching method used, risk of students' non-acceptance, availability and/or accessibility of technology hardware to students at their ease, and most importantly incentives and potential initiatives from the institution where students are enrolled.

Literature Review

The recent developments in the field of accounting tend to render traditional teaching methods obsolete. The way accounting practices have evolved demand better quality of accounting education and better teaching methods (Ramen, Moazzam, & Jugurnath, 2016). According to Wijekumar, Meyer, & Lei (2012) radical changes in teaching methods towards technology-based teaching is irreversible. Almost two decades back it was recognised that in order to improve the quality of education in accounting, innovative ways of teaching must be implemented (Albrecht & Sacks, 2000). Teaching approaches designed should be able to fulfil the requirements of the financial sectors, so that students are able to tackle real life accounting problems in real business environments. With modern technology now a part of daily lives, real life accounting issues can only be dealt with through boosting essential technical skills and competencies in accountants.

The traditional/conventional form of higher education institution teaching involves lectures and notes, boards, and requires physical presence of the teacher and the student. But the rapid inroads which ICT has made in the accounting field nowadays, has been making innovative transformations in the structure and function of accounting education. E-learning and distance learning approaches are examples of this (Petridou & Spathis, 2001).

Students with comprehensive understanding of the subject matter through induction of practice are considered to be part of active learning (Adler, 1999). Inductive teaching is claimed to result in good academic achievements compared to productive teaching. Kelley (1999) claimed confidently that technology based learning improves the corroboration of a subject, for instance accounting, with higher chances of successful future career, against students upgrading knowledge from books only. Bonwell & Eison (1991) made numerous proposals on the use of collaborative learning, visual multimedia during lectures (multimedia, video, slides), simulations, role playing and various graphics. The use of these for learner participation and problem solving through use of computers, iPads or other computerized tools for teaching are critical.

An important requirement, however, is to align and define the accurate benchmark in relation to the adoption and implementation of technology based learning methods. Fischer, Kollar, Stegmann, & Wecker (2013) argue that an accounting academic who establishes the goals and objectives of the course and aligned its content accordingly, must also examine the knowledge and technical abilities of the learners, and assess

whether they will be able to use, and if so, at what pace, any new method of education, before implementing the new method.

One concern on technology-based methods is that the traditional accounting curriculum is 'rule-based' and demands rote-learning/memorisation. This meant that students were being trained and not educated (Carr & Mathews, 2004). This often led to criticisms that graduates were deficient in analytical skills and competencies (Arthur Anderson & Co. et al, 1989; Lovell, 1992; Wells, De Lang, & Fieger, 2008; Mohamed & Lashine, 2003). It is believed that development of students' analytical skills is dependent on the actual design of the accounting curriculum. Hosal-Akman & Simga-Mukan (2010) and Springer & Borthick (2004) argue that traditional teaching does not encourage students to value and establish analytical skills and capabilities, such as critical thinking. The natural extension of this argument is that technology based learning becomes imperative in order to introduce innovations into accounting education to develop students' level of communication, abstraction and thinking capabilities (Howieson, 2003).

Ultimately, however, accounting education has remained a narrow discipline (Basioudis & De Lange, 2009). The focus remains accounting for money in an enterprise using certain clear and specific guidelines and frameworks. This, therefore, leads to passive teaching techniques which focus on communication and transmission of well-defined knowledge to others (see Saunders & Christopher, 2003), thereby compromising the analytical capabilities and potentials of students. Such 'one way communication' illustrated by Wijekumar, Meyer, & Lei, (2012) highlights the fact that communication via text books and lecture methods places emphasis on specialised content and leads to memorised learning regurgitated in final exams (Adler, 1999; see also Crawford, Helliar, Monk, & Stevenson, 2011).

In contrast, technology based teaching promotes active engagement of students to effectively indulge themselves in the learning process (Still & Clayton, 2004). Bisman (2005) argues that the move from traditional to technology-based learning requires innovative teaching and establishing student-centred learning and class activities to promote students to be critical thinkers.

Existing literature promotes technology-based teaching. But there has been limited research on the effectiveness of such teaching. More specifically there is no literature on whether technology-based learning improves critical thinking of accounting students in the Pacific. For the Pacific, there is no literature even on students perceptions of various types of teaching methods available; nor is there any literature on the per-

ception of teachers on use of various types of technologies use for teaching accounting. This paper looks at some views of accounting students at one university in Fiji, the Fiji National University.

Case Study: Accounting Students at Fiji National University¹

A student perception survey was conducted at the Fiji National University in 2016. The survey aimed at getting the views of accounting students on traditional v/s technology-based teaching methods. A total of 179 accounting students enrolled in different accounting programmes at the University's Namaka and Nasinu campuses were interviewed through structured questionnaires on their views on technology based teaching. 166 properly filled and error-free responses were received. Out of 166 respondents, 91 were males and 75 females. Gender balance was aimed at to get a set of data which is free from gender biasness, but full gender balance was not possible. Of the 166 respondents, 34 (20%) were enrolled in Higher Education Diploma in Accounting, 91 (55%) in Bachelor in Accounting, 23 (14% in Post-Graduate Diploma in Accounting, and 18 (11%) in Masters of Commerce.

A vast majority of the participants showed positive responses toward technology-based teaching as compared to traditional classroom teaching. Those who did not show a positive view on technology-based teaching were interviewed in person. During these, they informed the researchers that they had issues with established accounting labs and slow internet connections. This made them reluctant to show support for technology-based teaching.

On whether students believed that technology based teaching helped them in solving accounting problems better, responses were divided - there were equal number of students who were not sure as there were those who were sure that technology-based teaching helped them solve problems better.

Students were also asked whether they contacted industry experts whose contacts were more readily available through different websites. A vast majority of the respondents responded negatively.

Researchers also wanted to know whether students tried to contact overseas accounting students to share their learning outcomes and issues. None did this.

Respondents were also unsure whether technology-based teaching provided them a status of virtual-students.

¹ Details on the study can be obtained from the authors.

Issues

The Fiji National University is a large university with multiple campuses. It is a major provider of accounting programmes in the region. A major challenge for the university is to maintain equal-quality programmes at every campus. Technology-based teaching is a good tool in this regard. Online availability of as much teaching resource as possible reduces possible disparities in access to materials and standards. Combined with local/campus level traditional teaching methods, technology-based teaching is a great advantage. Students have shown enthusiasm towards the adoption and implementation of technology based delivery of education vis-a-vis traditional teaching methods.

However, students from poor backgrounds have issues with access to computers. University provided computer labs are of significant help, but most students are non-residential rural students, which limits access to these labs. Poorer students do not have access to computers after-hours and where they did, some had issues with internet connections. The latter included both, availability of internet after-hours, as well as, where connectivity is available, with speeds and consistency of signal coverages at their homes.

Notable also is the result that even during their presence on campuses, students did not find wireless connectivities strong at all times and at all locations on campuses. This dampened their enthusiasm towards technology-based accounting education delivery.

This research did not investigate the skills of the various accounting educators in delivering technology-based accounting education. This area needs research.

Conclusion

Rapid technological developments have impacted delivery of education at all levels. In Fiji, delivery of accounting education at the post-secondary level now cannot remain at the traditional blackboard/white board level. Significant E-resource availability provides a major boost to accounting education. Technology-enabled teaching methods are also now widespread. Students in accounting are thrilled with technology-based teaching. For a multi-campus university like the Fiji National University, technology-based teaching reduces the potential problems of differential access to resources and delivery of content. However, for the University to realise this potential of technology, investments in IT facilities on campuses as well as to students is essential. While it may not be

the core role of the University to provide students computers or electronic gadgets for after-hours use, a University can enable, on its own or through group student initiatives, to invest in acquiring these through various schemes, including a student-loan scheme. Technology-aided teaching and learning can only succeed if there is equal access to technology for all students. In addition, the skills of accounting educators at all levels and in all campuses also must meet basic requirements. It is vital that such minimum standards be established, and all educators be trained to these levels. The effectiveness of technology-based accounting education can only be usefully measured when the basic pre-requisites are met.

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