

Conference Paper

Learning Model Based on Information Technology in an Accounting Education Courses Based on Technology at Faculty of Economics in Universitas Negeri Semarang

Satsya Yoga Baswara, Ratieh Widhiastuti, and Lita Citra Dewi

Universitas Negeri Semarang

Abstract

It cannot be denied, nowadays technology is an inseparable part of learning in the classroom and also in the business world. Because of this there are many employers hoping that accounting and accounting education students get teaching about information technology in the field of accounting when they go to college. To fulfill this, in the College in the major of Accounting and Accounting Education curriculum, there are courses called accounting information systems (AIS), Computer Accounting and Introduction to Computer Accounting. This courses, if traced back to its origin as mentioned above, is actually one of the very strategic courses. Why is it called very strategic value, because it is closely related to the development of information technology and the demands of the work world that are increasingly here becoming borderless. The teaching curriculum can be very different between each university depending on who and how the subject is coordinated. So that by using information technology learning instruments in the field of accounting developed by Wilis (2016), this study aims to examine a model of how to teach this courses in accounting education by incorporating the practice of using MS Excel in lecture meetings besides emphasizing the use of MS Visio

Keywords: information technology, computer-based learning, accounting education based on information technology

Corresponding Author:

Satsya Yoga Baswara

movingforwardyoga@mail.unnes
.ac.id

Received: 7 February 2020

Accepted: 9 March 2020

Published: 23 March 2020

Publishing services provided by
Knowledge E

© Satsya Yoga Baswara

et al. This article is distributed
under the terms of the [Creative](#)[Commons Attribution License](#),
which permits unrestricted use
and redistribution provided that
the original author and source
are credited.Selection and Peer-review under
the responsibility of the
ICE-BEES 2019 Conference
Committee.

1. Introduction

Technology is an integral part of learning in the classroom and also in the business world. Even in current developments, the technology itself continues to evolve in line with the times. Because of this, many employers expect accounting and accounting education students to get information on information technology in the field of accounting while attending college.

To fulfill this, in the college, curriculum in Accounting and Accounting Education, there are courses in accounting education in technology-based teaching. These courses

 OPEN ACCESS

include accounting information systems (AIS), computer accounting and introduction into computer accounting. The course is a support course for auditing courses. In addition, there are also computer accounting application courses and introductory computer accounting. This course is majoring in economics education, study program of accounting education is taken in semesters 2, 3, and 5 with a weight of 2 credits each (semester credit unit).

This technology-based accounting education course if traced back to its origin as mentioned above, is actually one of the very strategic courses. Why is it called very strategic value, because it is closely related to the development of information technology and the demands of the work world that are increasingly here becoming borderless.

According to the AICPA (2014), Learning sustainable technology is very important and should be in line with technological advances, accounting professionals must acquire new skills in the field of information technology. so that in practice later in the world of work things learned in school will indirectly improve the competency of other accounting competencies in each professional accounting institution produced by the university. The integration of the use of information technology in technology-based accounting education courses must be placed effectively and efficiently (AACSB, 2013). Considering that in one semester there were only 14 effective meetings if at the UNNES FE.

Indonesian accountant association through the educator accountant compartment (IAI KaPD), information system lecturer forum (2017), has designed the RPS (semester learning plan) related subject courses. But still the RPS is considered not really cover the actual needs of technological developments that occur.

Previously in teaching technology-based accounting education courses, there were courses that were full theory there were also full practices in the computer accounting lab. So far, the media used to study the business cycle flow and the accounting cycle are used by MS Visio as an information technology media to comprehensively understand the cycle process. However, according to Wilis (2016), the use of MS Visio is not enough, because in fact graduates in accounting who have obtained a course in technology-based accounting education must also be able to operate technology to be able to easily and simply translate financial data data.

According to Apostolou et al., (2014) the curriculum for teaching technology-based subjects can differ greatly between each university depending on who and how the subjects are coordinated. So that by using information technology learning instruments in the field of accounting developed by Wilis (2016), this study aims to examine a model of teaching technology-based accounting education courses in accounting education by incorporating the practice of using MS Excell in lecture meetings besides emphasizing

the use of MS Visio, the institution of learning used is the department of economic education, study program of accounting education, faculty of economics, Semarang state university.

So that in the end the course of technology-based accounting education is expected to change from course-based theory only and practice-based course can turn into courses based on theory and practice as an effort to respond to the development of information technology and the demands of a highly volatile and volatile work world (Basuki, 2013).

2. Literature Review

2.1. Teaching Model

The application of the learning model in the course should be packaged coherently with the nature of the education of the study program. According to Trianto (2011), the learning model is a plan that is used as a guideline in plan learning in the classroom and for determining learning devices including the use of computers. Whereas Hanafiah (2010) states that: The learning model is one approach in order to anticipate changes in students' behavior in an adaptive and generative manner. The learning model is closely related to student learning styles and teaching styles.

2.2. Teaching Theory Based on Technology

Gagne's Learning Theory is based on nine intellectual skills hierarchies arranged according to the level of complexity. Computer-based instructional design must identify the prerequisites needed to facilitate the learning process at every level. Whereas Bandura Social Theory emphasizes the importance of direct observation and modeling of behavior, attitudes, and emotional reactions. According to social theory Bandura instructional design will be more efficient if it gives power to learners to do things directly, applying attitudes and behavior and emotional reactions in learning will improve memory

2.3. MS Excell Within Accounting

Because the spreadsheet in MS Excel is an accounting tool that is considered fundamental enough to be used by accountants, graduates are now expected to have competencies in the form of basic understanding and knowledge of how accountants using

spreadsheets in practice. MS Excel was first introduced in 1987 and is currently one of the most popular spreadsheet applications used by accounting professionals. However, it seems that even now there are indications of a gap between the expectations and reality faced by Users (Ragland & Ramachandran, 2014). However, accounting educators are still trying to identify which parts of MS Excel should be discussed and how to best teach MS Excel in the classroom. Previous literature explains how accounting professors guide students in using Excel (Apostolou et al. 2014). Convery and Swaney (2012) who describe the process by which students analyze accounting data and develop expertise in using selected spreadsheet functions. Whereas Braun (2013), states that those who develop resources and instructional teaching for accounting are managerial tasks. the instructor not only cares about what MS Excel topics should be discussed but also the best way to teach MS Excel

H: the class that gets excel accounting extra function teaching further has competency in the field of excel accounting that is better than the class that is taught the initial level accounting function.

3. Methodology

This research is a quantitative research with an experimental model of peer to peer teaching / senior fellow student tutors using the Introduction to Computer Accounting class as an experimental arena. The population is Accounting Education study program students majoring in economic education at the Faculty of Economics, Unnes. Samples are Accounting education study program students majoring in economics education faculty economics P AKT 2018 A and B. The statistical test used is a different T test, used to see the difference between classes given treatment and classes that are not given treatment.

4. Result

Based on the instrument developed by Willis (2016), an experimental research was conducted in 2 classes, namely P Akt 2018 A and B along with one Akt 2018 class. Instrument was adjusted to the class conditions where the rest was done as what was exemplified by previous researchers.

The assumption from the author is why using these two classes, because the input of HR of students who enter into Accounting Education is mostly from Accounting Vocational Schools. When looking at the vocational education curriculum in accounting

department, the author dares to draw the conclusion that fundamentally, the ability of students from both classes in the field of operations of MS Excell in the field of accounting already exists, although perhaps at different levels.

Based on the results of questions given to the P Akt 2018 B class, which before working on the project question, have first received treatment / treatment in the form of group formation and taught in one class itself for specific material material in MS Excel. The results are compared to the 2018 P Akt A class, which is immediately given a project question without being treated first, namely:

I. P Akt B class is better able to answer project questions given

II. the level of knowledge of the usefulness of accounting in MS excel is better, this is evidenced by the results of the UAS introduction to Accounting computers whose results are better in the Act B 2018 P class

III. the quality of group teaching in the classroom, which is in the form of peer to peer teaching that is sufficient enough.

However, the results given by the experiments in the Accounting Education class were less reflected in the 2018 AKT class which was used as a comparison class. There could be various kinds of reasons why this happened. The reason for that might be:

1. The HR input of the 2018 AKT class is mostly from high school, maybe raw power is better, but does not have the discipline and accounting knowledge base that is strong compared to his friends in Accounting Education

2. because of the absence of treatment, it was suspected that the AKT 2018 class do not have any motivation at all with the results obtained above, the proposed hypothesis can be said to be **accepted**.

5. Conclusion

Accounting workers apply more technology in their daily activities. One simple tool used is MS Excel. new employees who have knowledge of the software turned out to have more value. Thus, accounting students and accounting education need to acquire strong Excel skills, as well as other technologies, such as MYOB and Accurate for example, before entering the real accounting profession. Standard makers and accounting teachers are looking for innovative and interesting teaching resources to help students learn new technologies. Based on this research, it can be seen an example of teaching resources that can be implemented in an accounting curriculum so that students can strengthen and deepening their ability on using MS Excel and another

technologies. My students and I enjoyed the research together and I always learned something new from student presentations when implementing peer to peer teaching.

References

- [1] Association to Advance Collegiate Schools of Business (AACSB). (2013). Accounting accreditation standard A7 <<http://www.aacsb.edu/accreditation/standards/2013-accounting>>.
- [2] American Institute of Certified Public Accountants (AICPA). (2014). *Core Competency Framework* <<http://www.aicpa.org/interestareas/accountingeducation/resources/pages/corecompetency.aspx>>.
- [3] Apostolou, B., Dorminey, J. W., Hassell, J. M., & Rebele, J. E. (2014). A summary and analysis of education research in accounting information systems (AIS). *Journal of Accounting Education*, 32(2), 99–112. doi:10.1016/j.jaccedu.2014.02.002.
- [4] Basuki, P. H. (2013). Pengawasan Implementasi “Green Accounting” Berbasis University Social Responsibility (USR) di Universitas Negeri Semarang serta Study Komparasi Universitas Se- Kota Semarang. *Jurnal Akuntansi dan Auditing*, 9(2),169-198.
- [5] Braun, K. (2013). Custom fabric ventures: An instructional resource in job costing for the introductory managerial accounting course. *Journal of Accounting Education*, 31,100–429.doi:10.1016/j.jaccedu.2013.07.004.
- [6] Convery, S. P., & Swaney, A. M. (2012). Analyzing business issues – with excel: The case of Superior Log Cabins, Inc. *Issues in Accounting Education*, 27, 141–156. <<http://dx.doi.org/10.2308/iace-50095>>.
- [7] Ragland, L., & Ramachandran, U. (2014). Towards an understanding of excel functional skills needed for a career in public accounting: Perceptions from public accountants and accounting students. *Journal of Accounting Education*, 32, 113–129. doi:10.1016/j.jaccedu.2014.03.002.
- [8] Trianto. (2011). *Designing a Learning Model Inovative-Progresive*. Jakarta: Kencana.