

Model for Development of Teaching Materials for Lecture on Tax Accounting with Computer Tax Programs

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Abstract:One of the objectives of the preparation of the Tax report is to provide information to parties who need it that will be used to make comparisons, assess the ability of a company, and as a guide for decision-making. In order to fulfill the above objectives, financial reports must be comparable. These comparisons can be done in two ways, namely horizontal and vertical. Horizontal comparison is a comparison of a company's tax financial statements with other companies for the same period, which in its concept can easily be used, in which the preparation uses existing software. This study aims to develop a tax accounting learning model using the Computer Tax program as a teaching material in lecture materials in universities. The specific target to be achieved in this study is to issue teaching materials in the form of financial accounting books compiled with the Computer Taxation program. To achieve these objectives, this study uses descriptive analysis to identify the problems that exist in financial accounting learning in universities in the city of Medan. That has been running all this time. These problems include not understanding students in using Tax computer programs that have been issued for a long time, and not motivated to study the program because of lack of guidance in carrying out the practice. To find the factors that become obstacles in understanding the use of the program. With the identification of these factors, then a teaching material can be arranged to motivate students to want to like the teaching material and the goal of educating the nation can be achieved.

Keywords: Development Model, Teaching Materials, Taxation, Computer Tax.

INTRODUCTION

The rapid development of innovation in the field of computer technology has spurred education practitioners to be able to utilize the technology. Therefore, student teacher candidates as successors of educational practitioners need to be equipped with the ability to master learning technology, especially the use of computers as learning media. This ability is very strategic as a provision for students in the face of competition to meet the demands of education in the global era.

The advancement of information technology has a positive impact on the advancement of the world of education today, it must be realized that the development of information technology has entered various facets of life, including the world of education. In the case of learning that is currently required to produce qualified graduates, of course, it must look at future demands that are not only competitive but also closely related to various technological and information advancements, the quality of the learning system

developed must be able to correct various weaknesses which exists. One way that can be developed is to change the conventional learning system with a more effective and efficient learning system with the support of adequate facilities and infrastructure. Learning by utilizing information technology facilities through the Internet network is one of the right alternatives and can overcome various learning problems.

This study refers to students of the Faculty of Economics Accounting study programs that attend lectures with Tax accounting courses, previous observations and evaluations researchers have identified problems from the side of students as learning participants. Learning that is followed by using a classical approach, such as lectures, discussions, question and answer, exercises and assignments is considered monotonous, it seems most students consider tax accounting lessons difficult so students are less motivated. Seen again from the results of the evaluation of learning through examinations, both done

in the middle of the semester and at the end of the semester, the scores obtained by students are low. The results of the study stated that the difficulties and failures of students were caused by internal and external factors including students, facilities, curriculum, learning resources and the ability of lecturers to teach students.

To overcome this, it is necessary to develop Tax accounting teaching materials with the Tax computer program as a reinforcement of Tax accounting learning by utilizing information technology as a learning medium used by students so that the lectures become effective, each course material given to their students will compare and connect the theory discussed in practice through the use of information technology such as computer use and software. Given that adults like practical learning and focus on problems, like learning that integrates new information with their experiences and learning likes that show individual attention. Information technology-based learning approaches are expected to help lecturers and students become more interested in running and following the courses provided and will add to the insight of the students produced later.

LITERATURE REVIEW

Learning technologies

Learning media is a tool used in the learning process. Learning is the process of communication between teachers, students, and teaching materials. Communication will not run without the aid of the means to deliver messages or media. So, as a tool, the media has the function of smoothing the path to achieving learning goals [1].

Learning activities of students with the help of the media will produce better learning processes and results than without the help of the media. With the media, it is expected that there will be maximum interaction between lecturers and students so that they can achieve learning outcomes that are in line with their goals. There is no provision when a media should be used, but it is highly recommended for lecturers to choose and use the media appropriately. The inappropriate use of instructional media will cause students to misunderstand the subject matter of the teaching material given and prevent them from achieving the learning outcomes as desired [2].

In the selection and use of the media must consider: first, the objectives to be achieved; second,

the suitability of the media with the material to be discussed; third, the availability of supporting facilities and infrastructure; and fourth, student characteristics.

Because the learning media is very decisive in the outcome of the educational process, humans continuously improve learning media. From the simplest, using written media made of stone, he used the blackboard in the middle of the XIX century, the use of radio in the early twentieth century, to the use of handouts, overhead projectors (OHPs), and computers. Television as a learning media has also been known and used today, for example at the Open University lecture program. The blackboard is a medium that is almost always used by all lecturers and is always in every room, in any college. In addition to the blackboard, OHP is also commonly used in the lecture or training process [3].

Among the various kinds of learning media that can be used in the learning process, further will be discussed about the use and use of computers in lectures because information technology is growing rapidly now making the development of computer technology very fast. This will result in a shift in people's views that make computers an essential tool for their lives. The education world must also be able to anticipate these changes, one of the ways to make computers a tool in the learning process. Various learning innovations with efforts to expand teaching materials have positioned the computer as a tool that contributes positively to the learning process, especially in universities.

Newby *et al.*, [4] define learning technology (Instructional Technology) as the application of knowledge about human learning for teaching and learning. Another opinion about learning technology is presented by Marcelino *et al.*, [5], which states learning technology is a theory and practice in designing, developing, utilizing, managing, and assessing processes and resources for learning. Tyack and Cuban's opinion cited by Henniger [6] states that new technology will succeed if the technology is flexible in assisting the teacher / lecturer in managing traditional aspects in the classroom, but technology will be ineffective if it demands that teachers change interaction with students dramatic.

The learning technology research area is very broad. One direction of the development of the area and the usefulness of education / learning technology is research conducted in relation to the media. One

characteristic if the concept of educational technology is applied in the education system is the existence and use of new sources in the form of people, messages, materials, equipment, techniques and settings that allow people to learn in a directed and controlled manner Marcelino *et al.*, [5].

A computer is an automatic electronic device that can calculate or process data carefully according to what is instructed and provide processing results, usually consisting of units of entry, expenditure units, storage units, and control units. Many education experts argue that computers as learning media have enormous potential to help the education process. The computer as a medium in the learning process has several features that other media do not have, some features include the following.

- Computers can act as effective media to develop student interest and creativity in learning.
- Computers can make students actively participate in learning (the creation of interactive relationships).
- By using a computer as a learning medium, students often learn as much teaching material with less time.
- Students who learn with computer media have the ability to remember
- lecture material in a longer time and can use it in other fields.
- The computer provides facilities for students to repeat lessons if needed, with the aim of strengthening the learning process and improving memory.
- Computers help students get free feedback and can motivate students with positive affirmations given if students provide answers [7].

The features as above are also strengthened by several research results, which show that the effectiveness of learning with computer media is better than learning with traditional media. Kulik *et al.*, From his research results said that students who use computers for 10 minutes per day in learning mathematics, get significantly better results than students who do not access the computer at all. Meanwhile, Merrill [8] says that students who are trained using computers in learning key music also get significantly better results than students who do not use computers [7]. Examined the teaching of reading given by using a computer terminal for 20 minutes per day and the results were significantly better in the final test that had been standardized than those who did not use a computer.

Computers as learning media

Computer technology makes it possible to present some or all forms of stimulation, namely interaction between humans, reality, moving images or not, written and recorded sounds, so that learning can take place optimally. The empowerment of computers as learning media has several advantages [9], namely: (a). New ways of working with a computer will generate new motivation, (b). Musical colors and animated graphics can add the impression of realism, (c). Rapid personal response will result in high reinforcement, (d). Memory capability allows past appearance to be recorded and achieved in planning the next step, (e). The ability to record power facilitates individual teaching for all intellectual levels.

Various opinions were expressed by experts about how good a software is, which is used as a computer-based learning media. Merrill [8] states that learning software must meet the following requirements: (1) instructional criteria, (2). Criteria in presentation, namely screen format, navigation buttons, easy to use, (3). Curriculum criteria, and (4) evaluation methods.

Programming learning requires skills such as abstraction, generalization, transfer and critical thinking [5], which are not easy to form. The steps to develop a program that can be done by students, recommended by Min Hu [10] are (a). Analyze input, process and output, (b). Draw a flowchart, (c). Check the suitability of the flowchart with the desk-check problem, (d). Change the flowchart to program codes, (e). Track syntax errors, (f). Compare the results of the running program with the desk-check results to find logic errors, and (g). Document results.

Students use new sources in the form of messages in the media making assignments given by lecturers. The new source in the form of the message is a flowchart to show the flow of students' logic in programming. As many as 88% of students showed a positive response that an explanation of the program flow chart (flowchart) helped students understand how to program. Flowchart, which is a nonlinguistic representation, allows students to learn better in programming. This is supported by the opinion of Henniger [6] that "using both linguistic and nonlinguistic representations enables students to better process and remember what they are leaning". Especially in computer programming, making a

flowchart is indeed one of the stages recommended as steps for learning Computer Programming [10].

RESEARCH METHODS

This study aims to develop teaching materials for financial accounting courses using a computer tax program which is one of several software that can be used in managing financial statements. This study uses primary and secondary data. Primary data in the form of perceptions of students at private Islamic universities in the city of Medan related to this problem, were obtained through questionnaires and interviews. Secondary data in the form of examples of financial statements presented by the company, both manufacturing and services, are obtained by opening the relevant company website. In this study, the Research and Development method was used because this research was planned in stages, in the early stages of the development of the problem, namely finding problems in general, then segmenting the problems specifically by distributing questionnaires. Further testing and evaluation will be carried out, as well as the preparation of taxation textbooks with tax computer programs and Tax Accounting Teaching Material Socialization Data collection techniques were carried out by field study by distributing questionnaires to students who were taking classes in the current year from various Islamic universities in the city of Medan. This research uses descriptive-exploratory method. To identify various symptoms and root causes in following taxation lectures.

RESULTS AND DISCUSSION

In the first phase of the study, the learning component was produced in the form of Lecture Contracts, Learning Planning, syllabus, media and sources of computer tax-based learning, textbook drafts, and student perceptions of tax accounting learning. The results that have been obtained will be applied in the learning process of tax accounting, with contextual methods, with the steps outlined in the previous chapter.

The draft textbook will be used as a guide in the learning process, so that the material provided would be in accordance with the learning components that have been prepared. The compiled textbooks will include the tax accounting component that will be applied to the taxation computer, so that the content will be more focused. The textbooks are arranged in a format almost similar to the practical book because they contain more practice questions with working papers, for completion.

In the second stage, the learning components that have been prepared will be implemented, along with the planned learning methods. The learning method that will be implemented is contextual learning. As a result of previous research, it shows that this approach makes learning achievement values significantly different and the use of contextual methods shows positive results in terms of learning completeness and student-centered learning activities, such as asking questions, discussing between students and lecturers and working in groups. The application of contextual methods will make learning centered on students, with lecturers as facilitators.

Students will be more active in everything, explore learning resources and references from various existing practices, and understand the concepts of the process obtained by students from their experiences. The role of the lecturer as a facilitator and motivator, who directs the student's movement to obtain a comprehensive concept.

In the implementation of this learning method, the lecturer will give a pre-test and post-test at the beginning and end of the meeting in class, with the aim to explore the level of understanding before and after attending the lecture. Besides, giving a questionnaire to find out their perceptions before and after learning. Assignments are made in groups and individuals so that students can learn from each other from their groups. Assignments given are expected to motivate the emergence of students' creative ideas and thoughts. Assignments will be given more to student activities tax accounting practice activities, and evaluating tax accounting using computer tax.

Motivation to learn

When viewed from the results of the questionnaire data that has been obtained on the learning motivation indicators for tax accounting courses in the unfavorable category there are 2 statement items that are "very interesting learning material" and "lecturers provide something interesting for students". That means that the learning material in the introductory business course does not attract the attention of students. This is because the material provided is only monotonous and provides learning material based on the language of the book. Motivation in learning should be given by the lecturer in the form of business efforts that can cause a person or group to move to do something they want to achieve the goals they want, because motivation in learning contains

value that is determining the level of success or failure of student learning actions, because learning without motivation then it's hard to succeed. Motivated teaching is teaching that is tailored to the needs, encouragement, motives, and interests that exist in students. Therefore, in need of teaching that motivates, creativity and imagination on the lecturer is one of the relevant ways to generate student-learning motivation.

Whereas from the results of the questionnaire data to see the learning motivation of students with good categories there are also 2 statement items, namely "This learning is very abstract so it is difficult for me to maintain student attention" and "Lecturers provide information about learning material". Learning motivation will not be formed if students do not have desires, ideals or realize the benefits of learning for themselves. Therefore, as a lecturer, it needs conditioning or better teaching methods by providing better material so that the spirit of learning and student learning motivation will increase.

Learning Activities

When viewed from the results of the questionnaire data that has been obtained on the indicator of learning activities for taxation accounting courses in the bad category there are 2 statement items, namely "Lecturer teaching has been maximal" and "Lecturers provide tests in accordance with the subjects that have been given in the lecture". In learning activities, students need reinforcement / enrichment and some others need remedials. Strengthening / enrichment activities are carried out to strengthen and enrich the understanding of students who have reached or exceeded the achievement of minimal competencies. Enrichment can take the form of project assignments carried out outside of class hours. On the other hand, activities are carried out to facilitate and help students who have not achieved the required minimum competency mastery. This makes students more active in learning activities.

Learning outcomes

So the learning outcomes are tangible results achieved by students in an effort to master physical and spiritual skills in lectures that are realized in the form of semester results cards on each semester. To find out the development until someone in learning has achieved the results, evaluation must be done. To determine the progress achieved then there must be a criterion (benchmark) that refers to the goals that have been determined so that it can be known how much influence

the teaching and learning strategy on student learning success. Student learning outcomes are successes achieved by students, namely student learning achievement in realizing their desires.

Taxation Computer Knowledge

From the results of the above average score frequency there are two statements that the average is not good the first is about the lecturer explaining the importance of knowledge about computers and the second is about lecturers explaining the infrastructure of information systems and information technology, therefore it can be concluded that lecturers have explained well that only students who pay less attention to the solution are the lecturers must create an atmosphere of interactive lectures so that students do not feel bored and will pay attention to the lecturer when explaining the material. From the above it can be seen that the Taxation Accountancy course is very much needed.

CONCLUSIONS AND RECOMMENDATIONS

In general, the learning conditions of Tax Accounting are good, but development is needed in terms of learning models. The appropriate method used is the contextual method. The components of the Tax Accounting learning curriculum must be tailored to the needs of the business world. Textbooks used, as guidelines in learning need to be adjusted to the needs of education. For this reason, it needs an understanding of the lecturers about the characteristics of students who are taught, so that they are able to do learning innovations. Lecturer understanding of contextual methods is needed to be able to teach effectively and achieve learning objectives. Textbooks need to be uniformed with the same lecturer as the same subject.

REFERENCES

1. Akour, M. A. A. (2006). The effects of computer-assisted instruction on Jordanian college students' achievements in an introductory computer science course. *Electronic journal for the integration of technology in education*, 5, 17-24.
2. Lipscomb, S. D. (2008). Advances in music technology: The effect of multimedia on musical learning and musicology investigation. *Technological Directions in Music Learning*.
3. Schwier, R. A. (1992). Interactive Media and Distance Education for Saskatchewan Schools.
4. Newby, T., Stepich, D., Lehman, J., & Russell, J. (2000). Instructional technology for teaching and

- learning: Designing instruction, integrating computers, and using media. *Educational Technology & Society*, 3(2).
5. Marcelino, M., Gomes, A., Dimitrov, N., & Mendes, A. (2004, June). Using a computer-based interactive system for the development of basic algorithmic and programming skills. In *International Conference on Computer Systems and Technologies (e-Learning)* (pp. 8-6).
 6. Henniger, M. L., & Rose-Duckworth, R. (2004). *The teaching experience: An introduction to reflective practice*. Pearson/Merrill/Prentice Hall.
 7. Lipscomb, S. D. (2005). Advances in music technology: The effect of multimedia on musical learning and musicology investigation. *Technological Directions in Music Learning*.
 8. Merrill, P. F. (1995). *Computer for education*. New Jersey: Merrill Prentice Hall.
 9. Kemmis, S. McTaggart. 1982, 1986, dan 1990. *The Action Research Reader*. Victoria: Deakin University Press.
 10. Hu, M. (2003). A case study in teaching adult students computer programming. In *Proceedings of the 16th Annual NACCQ*, 287.