



## **Scientific Learning Approach on Subject Material Computer Application for Financial Administration**

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### **Abstract**

Through the 2013 curriculum as a transition from the Education Unit Level curriculum (KTSP) 2006 into a real effort of the government to improve the education process in Indonesia, in the 2013 curriculum with the learning system of students are told to be the students of the 21st century. 2013 curriculum is a scientific approach, a scientific approach is a learning process approach using 5M syntax (Observing, Asking, Gathering Information, Associating / Reasoning and Communicating). The subject of Financial Administration is one of the new subjects in Vocational High School Administration Expertise Program on the Basic Competencies of Computer Applications for Financial Administration. The application of a scientific approach is only included as one of the administrative requirements in the Lesson Plans. The purpose of this research is to know the application of scientific approach with 5M syntax (Observing, Asking, Collecting Information, Associating / Reasoning and Communicating) by describing the activity of each 5M syntax on Financial Administration Subjects Administration Program Administration Class XII SMK Negeri 9 Semarang Year Lesson 2017/2018. This research is a qualitative research. Data collection is done by observation, interview, and documentation. The results showed that in the learning activity dengan scientific approach by using 5M syntax is done well but in one meeting not all sync 5M activities, but the 5M syntax is divided into several meetings on core learning activities, because the learning in every meeting consists of opening activities, core and cover. The 5M syntax scientific approach is carried out in Core activities.

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## INTRODUCTION

To meet the future needs and to meet the Indonesian Golden Generation of 2045, the Government through the Ministry of Education and Culture sets the Competency Standards of Graduates based on XXI Competence, Demographic Indonesia Bonus, and Indonesia Potential to Group 7 of the Largest Country Economy, while strengthening Indonesia's contribution towards the development of world civilization (Permendikbud No.21 Tahun 2016).

Through the 2013 curriculum as a transition from the Education Unit Level curriculum (KTSP) where learning on the 2013 curriculum with the learning system of the students is told to be the students know or in other terms is from teacher oriented to student oriented . To achieve or apply student oriented learning model learning used in the 2013 curriculum is learning with a scientific approach .

Scientific approach is a scientific approach to learning is a basic concept that inspires or background for the formulation of teaching methods by applying the scientific characteristics. The approach of scientific learning is part of a pedagogical approach to the implementation of classroom learning that underlies the application of scientific learning methods. The application of this scientific approach includes five stages that are often known by the term 5M (Observing, Questioning, Exploring, Reasoning and Communicating).

Eye the lesson of financial administration in the curriculum of 2013 computer application p for financial administration there is no application specifically used in the learning of financial administration so that students in learning skill mastery using financial applications have not mastered the skill is only limited to knowing. In addition, the limited media and applications

used in the learning process also affects the mastery of students' skills in mastering financial administration applications.

The purpose of this research is to know the application of scientific approach with 5M syntax (Observing, Asking, Collecting Information, Associating / Reasoning and Communicating) by describing the activity of each 5M syntax on Subjects Financial Administration Program Administration Class XII SMK Negeri 9 Semarang Year Lesson 2017/2018.

Benefits in this research is to produce thesis on learning activities with the approach of scientific learning on the subjects of Finance Administration on the subject of computer applications for financial administration. And give description about learning with scientific learning approach in learning subject of computer application for financial administration on subjects of Finance Administration.

## METHODS

This research uses qualitative research with case study nature. According Mulyana (2008: 201) case study is a comprehensive description and explanation of various aspects of an individual, a group, an organization, a program, or a social situation. While Sugiyono (2010: 15) states qualitative research is a research method used to examine the condition of natural objects, where researchers are as a key instrument. Data collection conducted in this research is done by doing observation, interview, and documentation. Data analysis was performed using data reduction techniques, data presentation, and verification. After the data analysis done, then drawn the conclusion.

## RESULTS AND DISCUSSION

Based on the general description of the process of implementation of learning by

using scientific learning on the subject of financial administration on computer application materials for financial administration in SMK Negeri 9 Semarang class XII Administration Office 1 has been running quite well. Implementation of learning d ilakukan teachers in the learning process of scientific learningsmoothly in accordance with the 5M stage. Stages performed in 5M activities in scientific learning each stage is divided into three meetings. Such as observing, asking and gathering information is done at the first meeting. Reasoning is done at the second meeting. Communicate at the third meeting. In each meeting in the learning process contains preliminary activities , core activities and closing activities. In the5M scientific process carried out on the core activities. This is in line with the Yuniasih (2014) study which states that teachers manage scientific methods are not sequential and adapted to the needs of students so that learning does not seem narrow and rigid. Besides Akbar (2014: 1) which states that the scientific mindset should not be directly accepted by teachers in the process of student competence development because if it is accepted rigidly the thinking steps will become so narrow and rigid, because it may be possible happens not necessarily in sequence (observing, questioning, reasoning, creating, trying, and communicating).

McPherson (2001) reveals that "the scientific method is that of a single list of steps, or recipe, that generates reliable knowledge." In accordance with the lessons learned on the subjects of financial administration on computer application materials for financial administration have applied scientific approach refers to the scientific method with 5M syntax. Steps or stages in the learning process has been going pretty well muluai dai activities observe up to communicate activities.

All stages in the scientific approach have been recorded in the learning activities

on the subjects of financial administration on computer application materials for financial administration. Activities observing, questioning and gathering information are made at the first meeting. Implementation of learning the first meeting was conducted with 3 stages of the first phase of preliminary activities, core activities and kegian cover . While the reasoning activities conducted at the second meeting with the learning process is done with three stages of preliminary activities, core activities and closing activities.For scientific syntax the last is communicating activities conducted at the third meeting. Same with other meetings that learning activities are conducted in three stages as well.

#### **Observing Activities**

For observing activities , based on observations in teacher observation activities using a reference from the Implementation Plan of learning. That is the preliminary activity as stated in the RPP (Learning Implementation Plan). Next observation activities, students observe and listen to the material presented by the teacher related to the material application computer for financial administration.Where the initial material observed by students is the teacher conveying the material briefly about computer applications for financial administration. Material presented by the teacher in the form of understanding of computer applications, understanding of financial administration, financial administration financial benefits, types of administrative administrative applications and financial advantages and disadvantages of each existing financial administration applications.

From observing activities are in accordance with the results of the researcher interviews to teachers admi nistrasi finance as ber ber ut:

"For my student observation activities show the various applications used in financial

administration. Here you see .. some examples of financial administration in the application there are advantages and disadvantages W2 "

This is in accordance with the observation of the learning device document in the form of RPP that researchers observe that in one RPP not all contain 5M elements but divided into several meetings, in a single meeting should contain elements of preliminary learning activities, core and cover. It is in this core study that the scientific process takes place and is carried out. For learning activities on computer application materials for financial administration preliminary activities teachers open the opening greetings and pray to begin learning. The teacher performs student conditioning so that the students are ready to receive the material to be conveyed by the teacher. Master reminded about maintaining the cleanliness of the environment, especially the classroom environment and reminded if there is garbage in the drawer or on the floor to be cleaned beforehand this as a form of character education to students so that students always keep clean and love the environment. Teachers presenting student attendance by calling one by one the students name. Teachers convey the learning objectives to be achieved after implementing the learning process on computer application materials for financial administration. Furthermore the teacher submits assessment techniques that will be used in assessing the basic competencies of knowledge and skills. The teacher conveys the method of learning that will be used in computer application materials for financial administration.

Observing activities done teacher by displaying video learning about computer application for financial administration. Students listening carefully to the learning video. After students have observed the teacher's learning video asking about what information can be taken from the video show. There is one student who is still confused by

the explanation of the video show. There are other group students who explain.

Also reinforced by the opinion of the Deputy Head of School curriculum concerning observing activities as follows:

"Observing aims in learning students can be able to understand the context of the situation that students do everyday. Observing activities can be done by listening, reading and or listening about the material tailored to the characteristics to be achieved by learners. (W2) "

P rinsip through stages observe (to identify or find the problem), to formulate the problem, propose or formulate hypotheses, collect data with a variety of techniques, to analyze data, draw conclusions and communicate concepts, laws or principles found (Machin, 2014: 28) . Besides Yuniasih (2014) states that observing the process of understanding a material has been done students by utilizing the senses possessed.

#### **Activity Questioner**

Learning activities in the learning are done in the syntac series of scientific approaches need to be done to train students to formulate questions related to the topic or material being studied. The questioning activity was conducted at the first meeting. In learning computer application materials for financial administration of students after the process of observing the material that has been exposed by the teacher then the students are welcome to menanyakan things that are perceived less understood by students. This is in accordance with what is presented by the teacher of financial administration as follows:

"For children who are less clear then he asked about what application is the most appropriate mother to create financial statements in accordance with the reporting activities of small cash transactions or financial transactions that are simple in accordance with our majors mother. (W.2) "

In the questioning activities are expected students are able to build their own knowledge of the material studied in this study activities berkanya berkaian about computer application materials for financial adminiatrasi. In addition to the questioning activities are expected learners mamahami and build their own material in factual, conceptual and procedural as an effort to train students to think metacognitive that activities can be done through the discussion of other fellow students or can be done also through group work. This is similar to what was delivered by Mr. Drs. Sunardi stated as follows:

"For the questioning activity is expected learners can build their knowledge in factual conceptual and procedural against a law or theory. So students can think metacognitif. Thus students are able tothink high level. In the questioning activities undertaken in classroom learning can be done through discussion or group work. Teachers at the time of asking to allow students to be given the opportunity to compose words to the context studied (W.1) "

From observing activities that have been described above this according to pedapat from Yuniasih (2014) stating that in the activity of asking Students trying to dig information from the teacher to understand the learning materials. Additionally Civil (2016) activities undertaken ask students filed pert anyaan, a FAQ, discussion, about information that is not understood, the additional information that you want more information or clarification.

### **Collecting Information**

Student activity gathering information is done at the first meeting after the student performs observing and questioning activity in scientific syntac in learning computer application material for financial administration.

For the activities of collecting data / information is intended to encourage students

to seek information as a material for dianalisis and conclude. Activities undertaken in the collection of information on computer application materials for financial administration that is concerned about finding material about the basic concepts of computer applications for financial administration covering the notion of computer applications, understanding of financial administration, types of computer applications advantages and disadvantages of using computer applications to create a financial reports as well as looking for tutorials one of the computer applications for financial administration that will later be used to simulate from the applications obtained.

Activity gathering activities information is done the teacher allows students to find material can be from the internet, books, or can be in the form of video. This is in accordance with the submitted by the teacher of financial administration subjects in an interview with researchers as follows:

"The activity of collecting information students looking for their own material that I have previously directed what materials should be sought. In addition, students also become temporary answers from the activities of the question is making a hypothesis (W.2.) ".Another opinion of the results of interviews with the vice principal of the curriculum field that the activities of collecting information is done by observing the surrounding environment or observing the events of certain objects so as to obtain data or information to be processed and reported orally writing, pictures or video. In addition, the activities of collecting information can be done with the literature by reading books or the internet or other literacy information from sources that are in accordance with the material being studied. This is in accordance with the results of interviews with the vice principal of curriculum as follows:

"Information gathering activities undertaken by students in learning activities

can be done by observing the circumstances surrounding the environment or the occurrence of certain objects are adapted to the learning materials with the aim of obtaining data or information subsequently the data or information students can make reports written, oral, image or video. Information gathering activities can also be done by literature reading books or internet by browsing or other literacy. (W1) "

Information gathering activities on financial administration subjects emphasize students looking for a concept of simple financial administration applications and looking for tutorials on the use of simple financial administration applications. This information gathering activity is used as a basis for students as an ingredient for associating or reasoning activities. Dimensional in the activities of reasoning students in learning activities is to understand and look for models in the form of video or other tutorials after that students practice in the use of the application.

Civil (2016) states in the activity of collecting information done Students are exploring, sources other than textbooks, interviews with resource persons, questionnaires, conducting experiments, modify or add or subtract.

### **Student Activities**

Activity associate in this research is the reasoning activity about the concept of theory and various types of computer applications for financial administration. Students compare and look for the advantages and disadvantages of various applications that have been collected from various sources and discussed in groups. After that, each group draws conclusions from some applications that are considered most suitable for the management of financial administration in accordance with the characteristics of the application of petty cash management.

In this process of reasoning each group saw the presentation of tutorials on financial administration applications to be considered carefully and imitated to create a tutorial and practice the recording in petty cash. Previously the teacher distributed some proof of transaction after the teacher gave evidence of transaction in the form of expense transaction that is receipt. Each group should create reports by utilizing computer applications for financial administration.

This is in accordance with the results of interviews with teachers of financial administration subjects as follows:

"To associate activities on the subjects of financial administration activities conducted by students is by way of students identify some applications that can be used in making financial reports after that students look for the advantages and disadvantages of each application. Furthermore, students see the video tutorial view of the use of computer applications for financial administration in groups. After students see the student tutorial video try to practice how to use the application. After the students memahmai and understand and master the use of applications, students create financial statements using the application. To demonstrate the students' ability to master the material on the use of computer applications for financial administration students create tutorials on how to use computer applications for financial administration, using the computer screen display recording application (w2) "

This is supported by the results of interview activities with the vice principal of the curriculum field that associate activities as follows:

" Collecting results from the results students have obtained is collected and extrapolated from what will be delivered (W1) ."

The activities of the Teacher learning implementation plan form the group in one group consisting of 6 students. Master

instructs students to discuss tutorial videos that have been searched from the internet as well as those broadcasted by the teacher and each group to record the steps of using computer applications for financial administration . In groups students make tutorials on the use of computer applications for financial administration . Teachers provide practice questions to input applied to create financial statements . Between learning activities contained in RPP with the activities of reasoning or associating that applied in class teachers have been implemented properly in accordance with the implementation plan of learning.

Civil Proceedings (2016) Associating in learning activities is done by, analyzing data in the form of creating categories, associating or linking information , mimicking in order find the pattern, conclude. Meanwhile, according Yuniasih (2014) association activities are activities when students try to connect some information obtained.

### **Communicating Activities**

Communicating activities in the learning activities with a scientific approach is the activity of describing the work created by students in the form of video tutorials. The student's activity is to present in front of the video tutorial class using the financial administration application.

The results of interviews with the vice principal of the curriculum field stated that the activities communicated as follows:

"Students do it in the class to make the report present the results discussed in class (W1)."

The results of interviews with teachers of financial administration subjects in activities communicate as follows:

"The children conveyed by each group give a conclusion of what has been discussed (W2)."

From the results of observations in the class activities in the process of communicating activities are as follows: For the first group describes the results of the video tutorial by explaining the steps of making an account of financial administration applications to the making of recording and preparing financial statements using the application of financial administration. From the activities of making financial statements by recording evidence of transactions that have been distributed by previous teachers. The proof of the transaction is recorded in the application to make the financial statements.

Yuniasih (2014) states that communicating activities Communicate works that have been created in front of the class . Civil Service (2016) also states that communicating activities can be done by presenting reports in the form of b , diagrams, graphs, preparing reports in written form, presenting reports .

### **CONCLUSION**

From the description and analysis of research results, the implementation of the scientific learning approach on the subject of financial administration of computer application materials for financial administration uses the steps of observing, menannya, collecting information, reasoning or associating and communicating done in three meetings. The first meeting on scientific learning activities step in core activities is the activity of observing, asking and gathering information. The second meeting of associate or reasoning activities is communicating at the third meeting. For the syntax of scientific learning is done not only at one meeting but divided into several meetings.

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