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LEARNING MODEL OF REPORT WRITING SKILL BASED ON PROBLEM THROUGH LEARNING CYCLE TECHNIQUE AS MEDIA OF STUDENTS' CHARACTER BUILDING

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ABSTRACT

This research is based on the writer's interest on the condition that show student of SMK must report the result of field practice in the form of scientific report. Based on the background, the research objectives are 1) to produce learning model of academic writing skill based on problem through the learning cycle technique for students of SMK, 2) produce of learning writing skill for academic purposes based on the problem as media for students characters building. It is in line with the law no: 20 in the year of 2003 about National Education System, 3) to improve students' skill in writing scientific report based on the problem as the implementation of scientific activity to build students' characters through learning cycle technique. The research method used in this study is research and development. The site of limited test conducted in SMK Profita Kota Bandung while the general test conducted in SMK Kab. Bandung Barat, SMK Kota Bandung, and SMK Kab. Bandung. Based on the result of preliminary study, it shows that learning model of academic writing skill based on the problem through the learning cycle technique can improve students' skill in writing scientific report. In addition, learning model of academic writing skill based on the problem can build the students' characters of being honest, discipline, and responsible.

PREFACE

The aim of vocational high school is to produce graduates who can work independently and fill the job vacancies. Based on SMK curriculum, learning approach that used are academic basic life skill, broad based curriculum and

competence based curriculum.The students of SMK need skill which will be able to face the work competition. The mastery of report writing skill is a one of skill which is expected to facilitate the field vocational. But, recently writing learning in SMK is not to be a main priority. Time allocation for Bahasa Indonesia lesson is only two hours. This is indicates that Bahasa Indonesia lesson has not been a major concern in SMK. Durry&Jones (2010) state that teaching writing skills is still considered a low priority within science and engineering curricula and presents faculty staff.

Those problems are giving the real condition of teaching and learning process in Bahasa Indonesia lesson and learning model in SMK. It will be a good suggestion in developing learning model. Learning model selected must be able to foster Bahasa Indonesia competence and provide SMK students to force vocational competence based on the main policies of the national education department states the implementation of programs in 2007 at SMK directorate.

In order that students have skill to write report, it needs an appropriate learning model. This learning model have to solve the complexity and uniqueness of the concept in learning writing the report, so it can be developed the students' potential. So it needs a learning model that can develop the creativity and activity based on vocational. The learning cycle technique is an alternative learning model that can improve the students' creativity and activity. This is in line with the opinion that

Consequently, we can say that the learning cycle strategy makes great strides in the educa- tional field as an effective teaching strategy due to its harmony with the nature of science and that the subject is a scientific knowledge and research and thinking method, and also because its attaches great importance to the learner(Qarareh, 2012).

Tuna & Kacar (2013) state that Students have to think creatively and complex for overcoming problems and difficulties and as a result, they have to think in an integrative manner in order to unify their thoughts. This situation can only occur when students have higher order thinking skills. These skills are called also critical thinking.

The purposes of this research are:

a. produce a learning model to write the report based on the problem using cycle learning technique thus becoming a reference model of learning in other fields.
b. produce a learning creativity to write the report based on problem as a media to build the students' character
c. improving the students' creativity to write the report based on problem as a form of scientific activity in shaping the writers' character through the learning technique cycle.

LITERATURE REVIEW

Writing skill is a capability to express ideas and feeling in a writing form. Writing skill consist of the use of phrase, organizing ideas and the use of the proper cohesion. Writing skill is categorized based on structure, there are the creativity to find and categorized idea, develop draft of writing, rewrite and revising, editing text, and develop full article.

The nature of writing learning as a learning that involves psychological and physical activity to find ideas, thoughts and imagination that are arranged in writing. As a psychological activity, the writers using her/his ability to think critically when he/she finds ideas and imagination. As a physical activity, the result of thinking must be realized in the form of written symbols.

In the establishing of a writing skills, required a creativity that involves logic and reason. Because a good writing is based on the content, the composition language aspects that include the use of words, sentence and writing systematics. Writing is multi technique and unique activities that require mastery of the variety of knowledge and skills.

In writing communication consists of four elements 1) the writer as an informan; 2) message or writing content; 3) channels and media in written form and;4) reader as recipient of the message. In other word, communication will not occur if the one of the element does not exist. (Sobari,2012:21)

Writing skill as a unique skill, needs knowledge and creativity. This is in line with the idea that students' mastery of composition in written, produce good writing (Nasir, Naqvi, & Bhamani, 2013). Writing involves aspects of reasoning and logic aspects that reflected in the content and composition in writing, and linguistic aspects are reflected from the use of words, phrases and mechanics of writing.

Writing scientific papers can not avoid the risk as a challenge. The students' challenge in witing scientific papers is able to overcome various problems. To solve one of them, teacher should give them direction and support. By giving support,not only can help the students but also it can help someone to solve the problems.

Scientific report is a paper that include the information about scientific activity. Sobari (2012: 40) states that scientific report is a written grain the result of scientific activities that have been done. Zainal Aqib (2006: 50) states that scientific report is a paper that contains a grain of research, development or evaluation of the content that presented using framework, rules and formats. The report is generally published in a limited but there is also a nationally circulated in book form.

The scientific report based on Sobari (2012: 49) has purposes as follow:

1) Scientific report as a grain scientific research report has means of assessment activities to a problem that is based on the scientific method that aims to acquire scientific knowledge of the problems' matter.
2) Scientific report as serving the development of scientific reports, it means that as activity to follow up study and to obtain information about how to use the theory or process for practical purposes.

Scientific report as evaluation activity, it means that scientific report as an activity which can determine the successful of a program. Besides that, scientific report is also measure scientific activities and the product of scientific activities.

Current learning should be centered on students (student center). So educators/teachers need to prepare the learning process that will be carried out by educators and learners. The educators' activity should be conditioned to mastering all of teaching and learning process. Teachers demanded to find a learning method that can give enough time for the participants.

Writing learning is directed to the involvement of learners as active, creative, and participatory. A way of learning that can foster activity, creativity, and participation of learners is a problem based learning. Problems learners obtained through interaction with activities in the field. Using problem based, the learners are expected to solve the problems related to the practices assignment and develop it in writing. Writing learning based on issues involving the students' ability to identify the problems, solve the problems, and decide the problems.

Writing learningn a scientific report based on problem aims to enable the students' writing ability as independently and creative. Aziz (2012: 66) states that, poster and slogan writing learning through problem based learning method is intended to make students are able to develop their ability to identify the problems in the surrounding areas, solve the problem, and finding the conclusion.

Writing activity is an activity that requires programmed and planned exercise. Therefore, writing activities will be better if doing as a programmed and planned with the guidance and the direction from the teachers based on the subject learning. Thus, learning cycle technique is very appropriate given to students of SMK as preparation to write scientific report based on problems.

Learning Cycle was first developed by the Karplus and Thier in the 1960s. Then in 1993 The Biological Science Curriculum Study(BSCS)proposed by Bybee development of constructivist learning method called learning cycle 5E yaitu engage, explore, explain, elaborate, evaluate (Qarareh, 2012).

The model of writing learning scientific reports based on problem refers to the development of learning model, based on the theory of Joyce&Weil (2009: 15), which includes 1) syntax, 2) social system, 3) principles of reaction, 4)

support system, and 5) instructional and nurturant effect. Development of a model, begins with the orientation of the model, the model of writing learning scientific reports based on experience using learning cycle technique.

The model of learning to write a scientific report based problem through learning cycle is a learning technique that consistent with Piaget's learning theory, in the other word it is based on constructivism learning theory. Philosophy of constructivism assume that knowledge is the result of human construction through interaction with objects, phenomena, experiences, and their environment. In this case, the students are given the opportunity to assimilate information by exploring the environment, accomodate information by developing concepts, organize information, and connect new concepts using the concept owned. This concept is used to explain a concept to write a scientific report with a different problem.

Based on the research that has been conducted, learning to write a scientific report through learning cycle technique not only having advantages but also disadvantages. Here are the advantages and disadvantages: 1) learning cycle technique can provide a solution to the variation problem in Bahasa Indonesia learning, either individually or in groups, 2) learning cycle technique appropriately used in teaching scientific reports based on problems, 3) learning to write a scientific report based problems through learning cycle techniques can form an honest character, responsibility, thorough and scientific attitudes, 4) the students' understanding to write scientific reports based on problems in learning cycle technique is higher than the students who learn using expository.(Sobari, 2012: 32)

The weakness of this model include: 1) require long time allocation, while the fact that time available for teaching is limited, 2) the learning process using learning cycle technique requires many meetings, to expedite the process of learning and to write a scientific reports based on problems,3) not pay attention to the students' characteristics (Sobari, 2012: 33)
Here are the steps of model learning cycle technique:

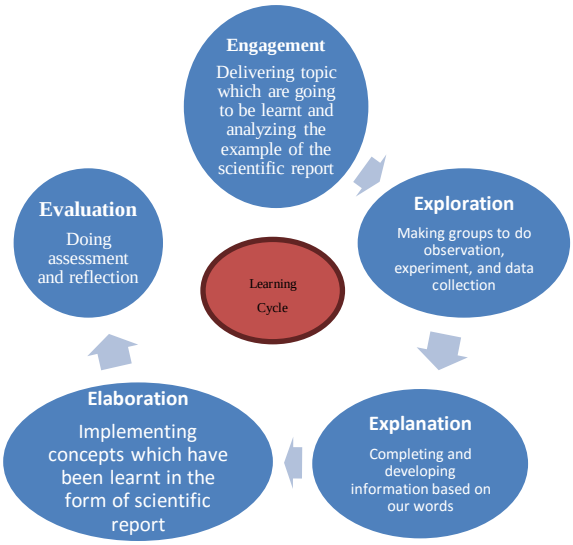

Figure 1: Implementation Phase of Learning Cycle Technique

RESEARCH METHODS

This study uses the approach of research and development (R&D) refers to the opinion of Borg and Gall (2003: 271). Research and development has the following steps:

a) Preliminary studies on the condition of Bahasa Indonesia learning in a SMK located in Cimahi
b) Conducting a need analysis of Bahasa Indonesia learning, especially in writing learning for students of SMK
c) Designing the model of writing learning as a media for the formation of characters' issues that are tailored to the needs of the field
d) Conduct the limited testing in a SMK located in Cimahi
e) Validation
f) Revise the learning model

The method used in this study is the experimental method to design pretest-posttest in control group,in other word it is consist of two groups (*Pre-test-Post-test With Control Group Design)*. One class gets learning through the learning cycle technique and other class get a lesson in normal way. At the beginning and the end, both of them give a test. The questions in pretest and post test for the writing skill based problem, as a media for characters building have equivalent criteria. So the design of the research is as follows:

Table 1 Research Design

Group	Pretest	Treatment	Post test
A	01	T	02
B	01	-	02

(Fraenkel & Wallen, 2012; 122)

Description

A : the experimental group
B : the control group

01 : pretest intended to determine the students' prior knowledge and students' ability to write a scientific report
T : after know the students' writing ability to research the subject from treated in the form of vocational skills through learning cycle techniques
02 : the result of post test after the learning process is completed

The data processing was done with the help of SPSS 17 (Court, 2010) and Microsoff Excel.

Research samples

The research conducted at SMK Profita Bandung, class XI-2 and 3 especially in office administration class with the total number 93 students.

RESULT AND DISCUSSION

The result of preliminary studies indicate that the ability to write scientific papers in scientific report is still considered difficult. They admit that they are not interested in writing activities, difficulty to find the sources and the writing materials, difficulty to describe the various theories and less accustomed to prepare a report based on empirical data. In addition, in general teaching of writing is presented in the form of lectures, question and answer, and task. The process of writing, less in giving the exercises to process the data based on the result of the practice, and revise it, in order that the shortage of scientific reports written by the sudents are not integrated in their writing skill.

In addition, the scientific report does not fill the characteristics of a scientific report, that revolves around the content of scientific reports, especially concerning the sources of writing from the book and the opinion by the experts, and scientific reports did not include empirical data. Similarly, the choice of words and the systematic and mechanical characteristics do not fulfilment the characteristics of scientific report.

Data were analyzed to increase students' writing skills in scientific reports based problem, as a form of scientific activity in shaping the characters of writer. The data was obtained from the pre test and post test. While improving the ability of students' writing skills in scientific reports based problem, as a form of scientific activity in shaping the characters of students in the experimental class and control class, views from the score gain formulated by Meltzer (Kurniawan, 2010: 114) were reviewed based on the student's ability categories.

Before the implementation of the study, the authors carry out a preliminary study as the first step to obtain information about the condition of Bahasa

Indonesia learning. Schools were used as a preliminary study are SMK 45 Lembang and SMK PGRI 2 Cimahi.

Pre test analysis of student' writing skills

Table 2 Output Normality Test as the Results of Pre test Writing Skill in Experiment Class

Tests of Normality						
	class	Shapiro-Wilk			Conclusion	Note
		Statistic	Df	Sig.		
pretes	eksperiment	.956	44	.095	H_0 accepted	Normal distribution

a. Lilliefors Significance Correction

Table 3 Output Normality Test as the Results of Pre test Writing Skill in Control Class

Test of Normality

	class	Shapiro-Wilk			Conclusion	Note
		Statistic	Df	Sig.		
pretes	control	.930	44	.011	H_0 rejected	Abnormal distibution

a. Lilliefors Significance Correction

Based on the results of pretest score calculation in experimental class, students' writing skills have significantly greater values of $\alpha = 0.05$ it means that H0 is accepted. This indicates that the pre-test score of the data in experimental class has normal distribution. While the results of the calculation of the pretest score, the data in control class, has a significance value smaller than $\alpha = 0.05$ it means that H0 is rejected and H1 is accepted. This is indicates that the pre-test score data is not normally distributed. Consequently, for average similarity test using a non-parametric test of Mann Whitney.

After analyzed with SPSS 17.0 the results obtained in the form of SPSS output table.

Table 4 Output test of Mann-Whitney

Ranks				
	kelas	N	Mean Rank	Sum of Ranks
writing	eksperimen	44	48.14	2118.00
	kontrol	44	40.86	1798.00
	Total	88		
Test Statistics[a]				
	menulis			

Mann-Whitney U	808.000
Wilcoxon W	1798.000
Z	-1.357
Asymp. Sig. (2-tailed)	.175
a. Grouping Variable: kelas	

At the Mann-Whitney, output of the test can be seen in the level of significance to test the two sides is 0175. Because of its significance value greater than 0.05, then H0 is accepted. It means that there are no differences in the average score of students' ability in the experimental class and control class. In other words, the experimental class and control class have the ability to write at the beginning of different students.

Post test analysis of student in writing skills

Table 5 Output Normality Test as the Results of Writing Ability Pretest in Experiment Class

Tests of Normality						
	Class	Shapiro-Wilk			conclusion	Note
		Statistic	Df	Sig.		
pretes	experimen	.876	44	.000	H_0 rejected	Abnormal distribution

a. Lilliefors Significance Correction

Table 6 Output Normality Test as the Results of Writing Ability Pretest in Control,Class

Test of Normality

	Class	Shapiro-Wilk			conclusion	Note
		Statistic	Df	Sig.		
pretes	control	.906	44	.002	H_0 rejected	Abnormal distribution

a. Lilliefors Significance Correction

Based on obtained the data processing, the results of posttest scores in experimental class and control class, both have significantly smaller values of $\alpha = 0.05$ it means that H0 is rejected. This shows that the post test score of data in experimental class and control class, the data distribution is not normal. Consequently, for an average similarity test using a non-parametic test of Mann Whitney.

After analyzed with SPSS 17.0 the results obtained in the form of SPSS output table.

Table 7 Output Test of Mann-Whitney

Ranks				
	Class	N	Mean Rank	Sum of Ranks
Writing	experiment	44	64.39	2833.00
	control	44	24.61	1083.00
	Total	88		
Test Statistics[a]				
				Writing
Mann-Whitney U				93.000
Wilcoxon W				1083.000
Z				-7.369
Asymp. Sig. (2-tailed)				.000
a. Grouping Variable: kelas				

At the Mann-Whitney, output test can be seen that the level of significance for two-sided test is 0.000. Because of the significance value less than 0.05, then H0 is rejected. It means that the students' writing ability in experimental class is better than the control class.

Analysis the results of students upgrades in writing skills

Table 8 Output Normality Test as the Results of Pretest Score in Class Experiment

Tests of Normality						
	Class	Shapiro-Wilk			conclusion	Note
		Statistic	Df	Sig.		
Pretest	experiment	.952	44	.066	H_0 accepted	Normal distribution

a. Lilliefors Significance Correction

Table 9 Output Normality Test as the Results of Writing Ability Pretest in Class Control
Test of Normality

	Class	Shapiro-Wilk			conclusion	note
		Statistic	Df	Sig.		
Pretest	control	.910	44	.002	H_0 rejected	Abnormal distribution

a. Lilliefors Significance Correction

Based on the calculation of N-gain, the ability to write in experimental class, the students have significantly greater values of $\alpha = 0.05$ it means that H0 is

accepted. This indicates that the data of N-gain in experimental class, the students' writing ability is normal distribution. While the results of the calculation of the data N-gain control the grade of students' writing skills have a significance value smaller than $\alpha = 0.05$ it means that H0 rejected and H1 accepted. This indicates that the data of N-gain is not normally distributed. Consequently, for an average similarity test using a non-parametris test of Mann Whitney.

After analyzed with SPSS 17.0 the results obtained in the form of SPSS output table.

Table 10 Output Test of Mann-Whitney

Ranks				
	kelas	N	Mean Rank	Sum of Ranks
writing	eksperimen	44	61.14	2690.00
	kontrol	44	27.86	1226.00
	Total	88		
Test Statistics[a]				
				Writing
Mann-Whitney U				236.000
Wilcoxon W				1226.000
Z				-6.176
Asymp. Sig. (2-tailed)				.000
a. Grouping Variable: kelas				

At the Mann-Whitney test output can be seen that the level of significance for two-sided test is 0.000. Because of the significance value less than 0.05, then H0 is rejected. The increasing of students' writing ability in the experimental class is better than the control class.

The discussion of model-based learning writing scientific reports through learning cycle technique

Formulation and implementation of learning begins in the draft of model to revised. Draf model is designed in accordance to the phases of learning techniques, and learning cycle which is supported by the principles of learning model according to Joyce and Weil (2008: 15) include 1) syntax, 2) social system, 3) principles of reaction, 4) support system, dan 5) instructional and nurturant effect.

The development of a model begins with the model orientation and learning model of writing scientific reports based on experience through learning cycle technique.

Model orientation

Model based learning to write a scientific report based problem through learning cycle technique is a learning technique that consistent with Piagets' learning theory, based on constructivism learning theory. Philosophy of constructivism assume that knowledge is the result of human construction through interaction with objects, phenomenas, experiences, and their environment.

In this case the students are given the opportunity to assimilate information by exploring the environment, accommodate information by developing concepts, organize information and connect new concepts, use or expand the concept, to explain a concept and write scientific report with different problems in each report. Implementation of the learning cycle technique refers to the theories of Piaget and developed by Karplus, into the exploration phase, introduction of the concept and application of the concept. Meanwhile, according to Throwbridfe (Kaplus R, 1975: 79) include 1) angagement 2) exploration 3) explanation 4) elaboration 5) evaluation.

Learning model

Here is the development model of writing learning a scientific report based on problems through learning cycle technique.

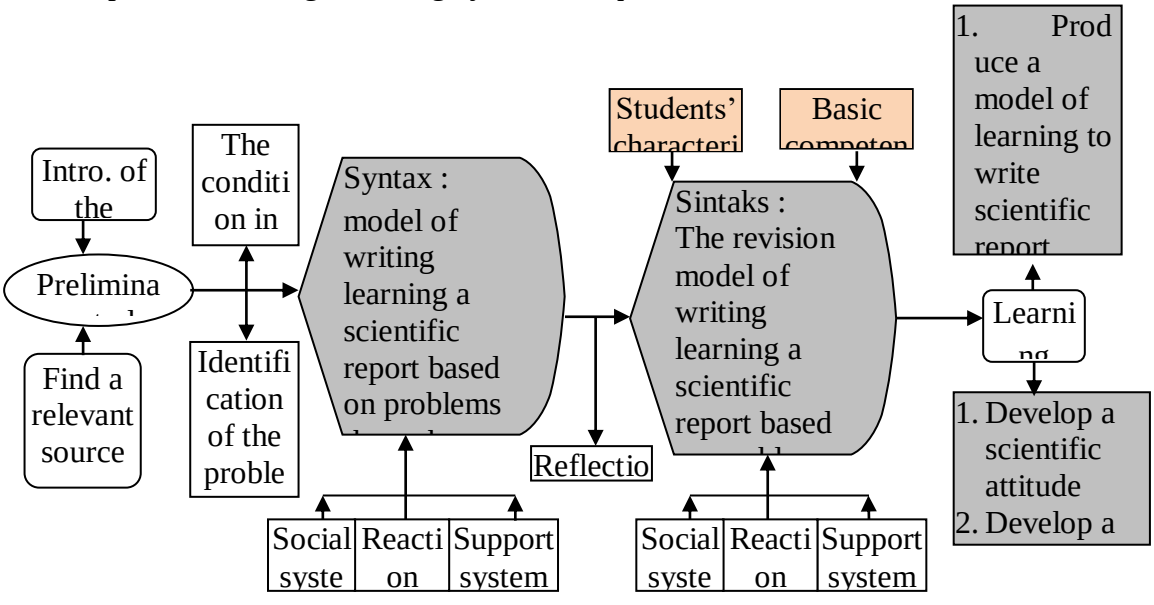

Figure.2

The Development of Instructional Model in Writing Learning a Scientific Report Based on Problems Through Learning Cycle Technique. as Media to Build the Character

SYNTAX

The phases of the learning cycle by Carin (1993: 87) consist of the phases of exploration, introduction the concept, and application the concept. Throwbridge (Kaplus R, 1957: 79) divide the learning cycle in five phases and known as 5E: 1) angagement, 2) exploration, 3) explanation, 4) elaboration, 5) evaluation. For more details of this syntax model, can be seen in the following description.

Engagement (attract the students)

At this phase, the teacher makes students interested in learning about the task of writing a scientific report based problems. Students' mental focused on a problem, situation or event. Activity at this phase, connect the activities of the task in vocational skills that have been implemented with the activity of writing a scientific report that will be done. Connect this assignment depends on learning tasks both conceptual, procedural, and behavior.

Activities in this phase aims to get students' attention, encourage thinking skills and help them access prior knowledge that they had. The emergence of students' curiosity about the theme or topic to be studied and to provide questions to the students about the facts/phenomena associated with the material to be studied. The question asked by the teacher: 1) have you ever made a scientific report based problem?, 2) What is practical of vocational skills that have been done?, 3) What are the benefits of writing a scientific report based problem for the development of writing skills and vocational skills?

Ask, assign an issue, and show incompatibility problem with the discussion is how to make students interested and focused on instructional tasks. The role of teachers is conditioned the classroom and identify the instructional tasks and develop the rules and the procedures.

Exploration / investigation

Teachers look for ideas to attract the students' attention, in order to make the students think about how to explore these ideas. In particular, teacher can design exploration activities in the classroom, in order to make students are familiar with the real experience of concepts, processes, and skills. By using the term of Piaget, the engagement phase is imbalance, while at the exploration phase of the process is balance. Some of the keywords used to describe the type of activity, that takes place in this phase is real and hands-on. The subject matter given at this phase must be careful because they have been prepared to assist the initial process of conceptual reconstruction.

The purpose of exploration activities is to develop experiences, the teacher may use or introduce a concept, process, or skill. During the activities, the students have time to explore objects, events, and circumstances. The Results of mental and physical involvement in exploration activity is visible when the

student establishes of relationships, patterns of observation, identification of variables, and the questions that correspond to the events.

In this phase, students are given the opportunity to work either independently or in groups without direct instruction from the teacher. Students work manipulating an object, conducting experiments (scientifically), make observations, collect the data, make a conclusion from the experiments performed.

The teacher as a facilitator help the students to work on the scope of the problem (hypothesis made earlier). According to Piaget's theory, exploration activities students are expected to experience cognitive imbalance.

The role of teachers in the exploration phase is as a facilitator or coach. Teachers organize activities and enable students to have the time and opportunity to investigate objects, materials, and the situation based on each concept, the teacher can also train and guide the students.

Explanation

Explanation means the act or process in the concept, process or skill that has been made clear, comprehensive, and open. At this phase, the teachers lead the students into more specific aspects such as the experience that has been done at this phase of engagement and exploration. First, the students were asked about what will be explained. Second, the teacher explains in detail either formally or informally.

Activities in this phase aims to complement, enhance and develop concepts that gained students. Teacher explains the concepts that understood by his/her own words, show examples of related concepts to complement the explanation, and introduce new terms are unknown by students. On activities related to experiments, teachers can get closer the relationship between the variables or conclusions that obtained by the students. Thus, students can improve their newly acquired understanding of the concept.

This explanation phase is carrying out the sequence of experience in the exploration phase. Therefore, at the initial activity of this phase teachers should convey to the students about the relationship explained by experience.

Elaboration (application of the concept / expansion)

After the students know the explanation of learning tasks, they are expected to develop their experience or elaboration the concepts, processes or skills. In some cases, students may have misconceptions, or they only understand one concept in exploration experience.

Interaction in the study group is one application of psychological theory by Vygotsky in the form of learning model. Groups discussion and cooperative

learning provides the opportunity for students to express their understanding of the subject matter and receive feedback from other people who have a level of understanding that is closest to their understanding.

These learning activities, lead students to apply the concepts that have been understood and skills possessed in the new situation. The activities at this phase aimed to enhance students' understanding of what they already know, in other word the students can make accommodations through relationships between concepts and students' understanding become more steady.

Evaluation

There are two things to note in this learning activity, learning experience that has been obtained by the students about writing scientific reports based problems and reflection to conduct further cycles learning to the next concept. Here is the stage of learning to write a scientific report based problems through learning cycle technique.

The first stage, giving preliminary tests on subject of the research with the aim to obtain the data of students' ability to write a scientific report.

The second stage, measurement capability of the students in early to write a scientific report. The results of these measurements are used as the initial ability of students to write a scientific report before it is treated with the instructional model of learning cycle for the experimental group and expository learning model for the control group. The ability of these students compared with the initial measurement result after the end of the learning process using cycle learning model and expository learning model.

The third stage, implementing learning to write a scientific report using learning cycle model. This activity is carried out by one Bahasa Indonesia teacher and one lecturer. Heri Isnaeni, M. Hum. in experimental class and Titin Suhartini, S.Pd. in control class, each for four meetings with ending test for each meeting. At third step is also carried out observations on the quality of teaching and learning process to write a scientific report using cycle learning model and expository learning model.

The fourth stage, with subsequent group discussion the students carry out the practice. This stage is carried out at 3rd and 4th meeting of teaching. At 3rd and 4th meeting, the teachers are able to master the learning process and the cycle learning model to observe the condition of the students while implementing the learning process. In order that teachers can carry out the stages of learning as an improvement of the instructional model of cycle learning. At this stage, students are trained to have a discussion with the group, and each individual makes a scientific report. The teacher's role at this stage as a motivator, moderator and facilitator.

The fifth stage, the teacher gives the final test after the learning process (post-test). The sixth stage, distributing questionnaires about the quality of the learning process to the students and teachers in experimental class and control class.

Social system

Writing learning model of scientific reports based problem, referring to basic principles of language learning, especially the principle of humanism, constructivism, and progressivism. In this case, it can be concluded that the main principle of learning is student engagement in the learning process and significance for themselves and their lives. They observe, process, abstract, generalize, and contextualize information from the environment to declarative knowledge, procedural, and conditional. They acquire knowledge about how the scientific report was based on a good problem and produce a scientific report in accordance with its objectives.

The Principles of reaction

During the learning activities take place, the teacher must always to be create in the conditions, in order that encourage the students to actively in discuss, practice, solve problems, and help each other to achieve goals together. Students must be responsive to the tasks and responsibilities given either individually or in groups to be able resolve the problem based on scientific reports. The instrument used to measure the principles of reaction is the component of responsible, creative, independent, scientific attitude, rigorous, and honest.

Writing scientific reports based problems through cycles learning technique carried out for research purposes. It is necessary for an understanding of the nature of scientific reports based problems. This model requires students' activity in processing the results of their study, the involvement of students in a discussion group is for cooperation and mutual help in achieving learning goals. In order that the individual would be easier in practice to make scientific reports based problems.

Support system

Supporting system required in the learning material to write a scientific report based problem, in accordance with the level of student understanding. The level of students' understanding in the nature of scientific reports include the problem-based, the problem-based scientific reporting purposes, the benefits of scientific reports of problem-based, the problem-based classification of scientific reports, and the systematic of scientific reports based problems.

Teaching materials as a learning resource covering PPT, student books, teacher books, worksheets, and LCD as media. The whole learning resources are available and can be used by all of students.

Instructional and Accompanying Impact

These models provide instructional impact of improving the students' ability to write a scientific report based problem and preparation in understanding the development of scientific reports based on expertise areas of teaching, in this case the field of study is in study program of office administration class. The accompanying impact of growing cooperation and mutual help in solving the problem, encouraging critical thinking and openness to other people's opinions. Besides that, other effects that can improve the vocational skills.

Students' characteristics

Iskandarwasid and Sunendar (2008: 168) state that the language learning required the selection of appropriate learning strategies, in order that learning objectives can be achieved optimally. It shows that in every lesson the teachers need to have the skills to choose and determine the appropriate of learning strategies to the content. Likewise, according to Suryaman (2012: 58) the strategy is a way of using all of capabilities and outside of themselves to achieve the desired goal.

Six factors influencing the selection of language learning strategies (Iskandarwasid and Sunendar, 2008: 169) include the characteristics of learners, the basic competencies expected, teaching materials, available time, facilities / infrastructure of learning, teacher's ability to select and to use learning strategies. Suryaman (2012: 58) states that if Bahasa Indonesia teachers want to be successful in teaching, must begin to see the potential of themselves and their students.

Based on the both of opinion above, the model developmet of learning writing scientific reports based problem, should pay attention to the role of model,Joyce and Weil state that the students' characteristics and basic competencies expected to be achieved.
The students' characteristics according to Iskandarwasid and Sunendar (2008:169)includes:

a) Maturity mental and intellectual prowess each student has different mental maturity and intellectual skills in writing. Each student must be prepared to learn and proficient in the language. Measuring tools of mental maturity, include the presence of a good response to learning, show enthusiasm in learning, and students have a responsible attitude, scientific attitude, and meticulous.
Based on the result of preliminary studies indicate that students in SMK, especially in study program of Office Administration have attitude in quite good mental maturity

b) Physical condition and psychomotor skills
c) Age
d) Gender

The Expectation of Basic Competence

Basic competence is minimal or inadequate statement of knowledge,skills, attitudes, and values, are reflected in the activity of thinking and act after the students complete an aspect of particular subjects (Iskandarwasid & Sunendar, 2008: 170).The ministry of education categorizes skills in curriculum of SMK into four groups: academic, personal, social and vocational. Vocational skill acquisition increase the creativity and the development of individuals understanding role in social life.

Thus, the competence to be achieved the students of SMK in class XI, are able to communicate in Bahasa Indonesia both orally and writing in equivalent intermediate level.

Data observed that learning process in SMK has its own characteristics, 90% of the learning process based on practice. Practices are held referring to the vocational competencies or their expertise. According to curriculum for SMK, the students of class XI must carry out practices in the field for 3 months. After carrying out practices to their areas of expertise, students are required to report in the form of practice reports.

Based on these conditions, the model of learning to write scientific reports focused on problem, related to the results of practice already implemented for 3 months. In order to the results of the report to be maximum, it needs continuously learning refers to the technique of the learning cycle.

The Results of Preliminary Studies

The overview of Bahasa Indonesia learning, looks at the result of observation to the students that conducted through questionnaire about Bahasa Indonesia learning as follows.

a) At the beginning of the learning, the teachers delivering learning goals of Bahasa Indonesia subject. The purpose of transfered in accordance to the purpose of learning materials, instructional media selection, and assessment.
b) The teachers' technique to teach Bahasa Indonesia in class XI, convey information about the teaching material briefly and then the student is required to do exercises that already exist in the textbooks.
c) According to the students, selecting the teaching materials are not correspond with students need, especially regard to the needs of the practice courses.
d) Generally, the selection of teaching materials rely to the book package that has been provided in the library and it was used in rotation for all students of class XI.
e) The students often do not understand with the teaching materials presented by the teacher.
f) Students feel bored because they don't have an understanding about the benefit of Bahasa Indonesia learning.

g) When the teacher teach not to use a particular method but using a lecture method, exercise, or discussion.
h) The students' understanding of Bahasa Indonesia in general is still minimal.

Based on the result of data processing,obtained that:

a) Application of learning models to write a scientific report based problem through learning cycle technique on Bahasa Indonesia subject at SMK Profita, done by the teacher of Bahasa Indonesia in class XI office administration program. The result of learning model is the result of a revision after trials conducted at SMK 45 Lembang and SMK PGRI 2 Cimahi.
b) Influence the learning model to write a scientific report based problem through learning cycle technique to create students' character.
The characters are in accordance with law no.20 in the year of 2003 on the national education system, consist of : responsible, creative, independent, scientific attitude, rigorous, and honest.
c) Cycle technique can improve the students' skill in writing scientific reports based problem.The increasing of students' skill in writing scientific report based problem as a form of scientific activity in shaping the writers' character through learning cycle technique. Based on these data, it can be concluded that the students' skill in writing a scientific report based problem in experimental class is better than in control class. Data obtained the result of mean score of pre test for experimental class is 11.97 and the mean score of final test for control class is 11.36. The data obtained by the mean final score of experimental class is 20.36 and the mean final test of control class is 14.40.

Mean score of pre test and post test in experimental class prove that the students' ability to write scientific reports has increased. Likewise mean score of pre test and post test in control class prove that the students' ability to write scientific report has increased. But, the increasing of writing scientific report in experimental class showed a significant increase compare to the control class.

CONCLUSIONS AND RECOMMENDATIONS

Based on the result of the studies that have been conducted, it can be concluded that:

Learning model to write scientific reports, focused on problem related to the results of practice that already implemented for 3 months. In order to the result of the report is maximum, the learning needs to be done continuously refers to the learning cycle technique.

Learning model to write a scientific report based problems require additional components on the aspects relating to vocational skills. In order that, in this study the authors propose a component of students' characteristics and basic competencies expected to be achieved at SMK as a new model of learning writing scientific reports based problems.

Learning model to write a scientific report based problem through learning cycle technique has influence in shaping the students' character. The characters are in accordance with law no 20 in the year of 2003 on the national education system that is responsible, creative, independent, scientific attitude, rigorous, and honest.

Based on observations with attitude and character of assessment instrument, the researchers obtain the data that students have responsible attitude, creative, independent, scientific attitude, rigorous, and honest.

Learning cycle technique can improve the students' ability in writing scientific reports based problem in SMK 45 West Bandung regency, SMK PGRI 2 Cimahi, and SMK Profita Bandung.

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FINAL NOTES

This study was conducted in 2015 as the initial research and will be continued in 2016 as an advanced research.

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