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The Influence of Problem-Based Learning Model as Learning Method, and Learning Motivation on Entrepreneurial Attitude

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Problem based learning model has been widely implemented in various fields and educational contexts since it challenges students to learn through engagement in a real problem. The purpose of this study was to investigate the influence of a Problem-Based Learning (PBL) model, learning method, and learning motivation on entrepreneurial attitudes. This was a quantitative study of a random sample of 250 students of class XI SMK PGRI 1 Jombang. The data were collected by observation and distribution of a questionnaire and were analyzed using multiple linear regression. The results of the multiple linear regression analysis gave a F value of 16,732 and significance 0.000. Therefore, it was concluded that the PBL model as learning method, and learning motivation had an influence on entrepreneurial attitudes.

Keywords: problem based-learning model as learning method, learning motivation, entrepreneurial attitude

INTRODUCTION

The 21st century learning has been influencing educational system in the word including in Indonesa. Learning quality must be improved through educational innovation and development (Kusuma, 2018). The educational system in Vocational High School (*Sekolah Menengah Kejuruan* or SMK) is designed to create an expert workforce in certain areas of expertise (Law Number 20 Year 2003). Vocational High School focuses on the specific expertise that students must possess for their field of study and the skills they must have mastered by the time they graduate. This expertise is not only knowledge of theory but also the ability (competence) of students to be active, creative, and innovative in their field of study. Every student should be able to take advantage of their knowledge to apply it in daily life. Consequently, the application of a learning method needs to be appropriate for the teaching-learning process (Buana, 2010).

According to Taha (2008), the learning process in the classroom was focused on memorizing information. Students needed to remember information but were not

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required to understand the information apply it in everyday life. As a result, the learning outcomes were not always achieved because the students' knowledge was rich in theory, but they had very poor understanding and experience of applying their knowledge in practice.

This situation applies to all subjects, including Craft and Entrepreneurship class. The students cannot develop their ability to think critically, creatively, innovatively, and systematically because the learning strategies that encourage this thinking are not employed well in the classroom. Students are only taught how to memorize theories in Craft and Entrepreneurship classes but not taught how they could be used to develop problem-solving skill in lives. It is in line with the view of Ramalhinho (2016) that students are required to enroll in the learning process in which they can discuss existing problem solving in everyday life by analyzing and providing solutions to the problem.

In order to face 21st century learning in which learners must possess both self-direction and an ability to collaborate with individuals, groups, and machines (McCoog, 2008). Craft and Entrepreneurship class should enable the student to be dynamics, motivated, creativity, able to use their initiative, and to have good thinking skills. They must be able to work together on assignment. Unfortunately, teachers of Craff and Entrepreneurship usually use a conventional learning model dominated by the teachers, question and answer, and assignments. Conventional learning models have the weaknesses of a lack of student interaction, and many students do not understand the information that the teacher conveys.

Conventional learning models place emphasis on observable behavior changes but the curriculum 2013 demands not only observable behavioral changes but also changes in students' critical thinking skills. Therefore, to improve the learning outcomes, teachers need learning models that do not overload students with learning facts. Entrepreneurship is to apply a problem-based learning (PBL) model so that the teaching patterns vary.

PBL is effective in developing questioning skills, thinking skills, and problem-solving skills as well as autonomous and independent learning. Ibrahim (2005) argued that PBL encouraged dynamic behavior, motivation, creativity, initiative, and thinking ability in students. Fadly (2012) showed that there was an increase in learning activities and the achievement of learning outcomes after employing a PBL model on entrepreneurship In addition, PBL uses an approach to authentic problems so that students can construct what is thought with the knowledge they have, students can develop skills as well as can increase self-confidence (Hosnan, 2014). The PBL model is a student-centered learning model that uses problems as a first step in collecting and integrating new knowledge. Students are given problems at the beginning of the learning process, they then solve the problems and eventually integrate the knowledge in the form of reports. PBL can provide students with a deeper understanding of both theoretical and practical analysis.

The educational process does not just consist of teaching, there must be communication between educators and students because people how and developed through social relations (2010). A one-direction teaching and learning process does not support student participation in the learning process. Therefore, students must be active in supporting

the teaching and learning process. Craft and Entrepreneurship subjects is a good example of subject that requires good collaboration between students and teachers. One of the goals of Craft and Entrepreneurship in SMK is that students have knowledge of entrepreneurial concepts and principles and have the skills to develop that knowledge and apply it in daily life. The knowledge and skills acquired must also help the student to continue education at a higher level, should they wish (Depdiknas, 2003). Consideration of these matters led us to formulate the following research question: Does the PBL model, learning method, and learning motivation have any influence on entrepreneurial attitudes? Consequently, the purpose of the study was to investigate whether the PBL model, learning method, and learning motivation influenced entrepreneurial attitudes.

LITERATURE REVIEW

Problem-Based Learning

Problem Based Learning (PBL) is a learning model that presents real problems that have occurred, so students are actively involved to be able to think critically and skillfully in solving problems (Shoimin, 2014). The PBL strategy is to give students problems and assignments that they will find in the world of work. In their efforts to solve these problems, students develop the knowledge and skills needed. Therefore, the sequence of the learning activities should parallel the sequence of events that occur in the working world. In this way, the students develop the cognitive skills and knowledge they need for the world of work. In this process, the students are responsible for their own learning because these are skills they will need later in their professional lives. They apply what they already know, find out what they need to know, and learn how to find the information through various sources, including online sources, libraries, professionals, and experts. In short, the PBL model aims to develop and apply important skills, such as problem-solving, self-study, teamworking, and accessing into knowledge (Barrows&Tamblyn, 2005).

PBL is student-centered learning¹ and is a learning model where problems control the learning process. PBL has been a very popular learning method in medicine since the 1970s. PBL focuses on presenting a problem (real-stimulus) to students, then asking them to solve the problem through research and a series of investigations based on the theory, concepts, and principles learned from different perspectives.

Problems become the focus, stimulus, and guide while the teacher acts as the facilitator and guide. There are five variations of PBL: 1) Problem as a guide: The problem becomes a reference for students. The reading copy is in accordance with the problem. Problems help to mold the student's frame for working on assignments. 2). Problems as a unifier and an evaluator: Problems are presented after assignments, and explanations are given. This approach aims to provide students with opportunities to apply their knowledge to solve problems. 3) Problems as examples: Problems are used as examples and part of the learning material. Problems aim to draw on theories, concepts, or principles and for students and teachers to discuss them together. 4) Problems that facilitate the learning process: Problems are used as a tool to train students and for

students and teacher to them discuss together. 5) Problems that stimulate learning: the problem stimulates students to develop skills in collecting and analyzing data related to metacognitive problems and skills (Yamin, 2013).

PBL is a learning environment where problems control the learning process. This means the students are given feedback in the form of problems before they learn. The problems are designed so that students know they must learn some new knowledge before they can solve the problem. This approach includes both a curriculum and a process. The curriculum consists of problems that have been carefully designed and chosen, requiring students to be proficient in critical thinking, problem-solving, self-directed strategic learning, and team participation skills. The process copies the systemic approach commonly used to solve the problems or to address the challenges faced in a person's life and career.

According to Suyatno (2009:58), the "...PBL model is a learning process where the starting point of learning is based on problems in real life. The students are stimulated to study prior knowledge to form new knowledge and experiences." For Arends (in Trianto 2007: 68), the PBL model is a learning approach in which students work on authentic problems to compile their own knowledge, develop inquiry and higher-level thinking skills, as well as develop self-confidence and belief in their abilities. PBL models are related to other learning models as revealed by Trianto (2007: 68): "PBL Model is related to Project-Based Learning, Experience-Based Education, Authentic Learning, and Anchored Instruction."

Learning Method

According to Sutikno (2014) the method literally means "way". The method is interpreted as a method or procedure used to achieve certain goals. The word "learning" means all the efforts made by educators so that there is a learning process in learners themselves. So, learning methods are ways of presenting subject matter conducted by educators so that the learning process occurs in learners themselves in an effort to achieve goals. Studying is the effort carried out by someone to obtain a change behavior, as a result of his/her own experience in interacting with his/her environment. (Slameto: 1995) proposed that learning method was the way or ability to carry out one's effort to obtain a change in new behavior as a whole, as a result of his/her own experience in interacting with his/her environment.

In addition, the learning method shows an understanding of attention/interest from the processes carried out during the learning activities (Robotham et al.,2011). The learning method is a complexity/pattern of characteristics in which the whole is greater than the parts. Therefore, the learning method relates to the general tendency towards a particular/specific learning approach shown by an individual to carry out his/her effort to obtain a new change of behavior as a whole, as a result of his/her own experience in interaction with his/her environment.

Learning Motivation

A motivation is a state of a cognitive arousal which provokes a "decision to act" as a result of which there is "sustained intellectual and/or physical effort" so that the person

can achieve some "previously set a goal" (Harmer, 2001). Motivation can be seen as a condition within someone that encourages that person to carry out certain activities to achieve the desired goals (Purwanto, 2011:60). According to Brown (2001:72) "Motivation is the extent to which you make choices about (a) goals to pursue and (b) the effort you will devote to that pursuit"

Motivation can be seen as an individual's internal drive. Motivation is dependent on individual internal factors, but these can be influenced by other internal factors and external factors in the environment. Thus, motivation has been defined as encouragement which either comes from someone's self or external to someone, to do something (Owens, 1991).

Various external factors will influence someone's motivation. Buford & Bedeian (1988) argued that motivation can be based on pressure, desire, and encouragement in relation to a need. Therefore, if it becomes a necessity, someone will have the motivation to conduct an activity to meet the need. Ardhana (1990) mentioned motivation as a very important element in the education process and in the process of carrying out tasks in everyday life. Because of the importance of motivation in everyday life, there have been many studies related to motivation in such areas of education and employment.

Consequently, in the broadest sense, motivation is a state (whether it is in the form of needs, desires, impulses, or urges) that compels a person to do a certain activity. In other words, motivation is the potential of someone to carry out an activity to achieve a goal.

Entrepreneurial Attitudes

In this study, attitude means a person's way of thinking or feeling about aspects of entrepreneurship, and especially business, the response can be negative or positive. Someone who acts and thinks healthily, ideally, and positively can be said as someone who has a positive attitude. This positive attitude is characterized by the courage to make decisions, and the courage to take risks as a result of the decisions taken, such as in the field of entrepreneurship or business. People with these kinds of attitude are known as someone who has an entrepreneurial attitude (Danuhadimedjo, 1998).

An entrepreneurial attitude identifies someone as having a controlled mental attitude. It describes can control the way they think and behave (Almasdi,2006). For an entrepreneur, the most important thing is to have a strong belief that what they are doing will bring prosperity in the future.

Entrepreneurial behavior patterns are shown by the following behaviors and abilities: 1) personality: having creativity, self-discipline, self-confidence, the courage to take risk, as well as drive and a strong will; 2) relationship skills, good communication, leadership, and management skills in interpersonal relationships; 3) marketing: the ability to determine products and prices as well as advertising and promotion; 4) expertise in regulating: business operations involves goal setting, planning, and scheduling, as well as personal arrangements; 5) finance: the attitude towards money and how to manage it (Hawkins and Turla, 1986)

Six characteristics of human beings who have entrepreneurial attitudes are: 1) having a strong willingness to achieve their goals and needs. 2) having a strong belief in themselves. 3) being honest and responsible. 4) having physical and mental resilience. 5) being diligent and resilient in working and trying. 6) having constructive and creative thinking (Soemanto, 1999).

METHOD

Research Design

This research used a quantitative research approach with a multiple linear regression test aimed at explaining whether there was an influence from the independent variables X_1 , X_2 , and X_3 on the dependent variable Y. The research design is shown in the Figure 1.

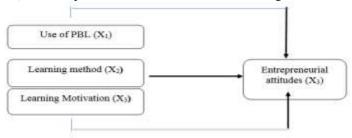


Figure 1

Research Design (Sugiono, 2011: 10-11)

Description:

 X_1 :Use of PBL

X2:Learning Method

X₃:Learning Motivation

Y: Entrepreneurial Attitudes

Population

The population for his study was 663 students from Students Class XI SMK PGRI 1 Jombang in the academic year of 2015/2016. The sample size was taken in the study using the Slovin method with a tolerance level of 5% (0,05) with the following formula:

Silovin =
$$\frac{N}{1 + N (0.05)2}$$

 $\frac{663}{1 + 663 (0.05)2}$
= 249,48 dibulatkan 250

Thus, the number of research samples amounted to 250 students with random sampling method

Data Collection Method

Two techniques were used to collect the data. First was interview and observation, in that the researcher conducted an initial observation of the use of the PBL method,

learning method, and learning motivation process; and the second was questionnaire, in that the researcher distributed closed questionnaires to the students of SMK PGRI 1 Jombang. The questionnaire related to the problems studied. Questionnaires in this study were used to determine the effect of learning methods and learning motivation on entrepreneurial attitudes of class XI SMK PGRI 1 Jombang. The type of questionnaire was a closed questionnaire. The result tested using validity and reliability tests, which showed that the variables (X_1) , (X_2) , (Y) were smaller significant. The results of the analysis above showed that the Alpha Cronbach value was 0.872, so categorized as reliable.

Data Analysis Technique

Data were analyzed with SPSS version 16. A multiple linear regression analysis was used to determine whether or not the PBL method, learning method, and learning motivation had an influence on entrepreneurial attitudes. This was formulated as:

$$Y = a + b_1 X_1 + b_2 X_2$$
 (Priyatno, 2009:73)

In which: Y = Dependent variable (entrepreneurial attitudes)

 X_1 and X_2 = Independent variables (learning method, learning motivation, use of PBL, respectively)

a= Constant (Y value if X_1 and X_2 , = 0)

Hypothesis Testing

The following hypotheses were tested to determine if the PBL learning method, and learning motivation had an influence on entrepreneurial attitudes:

 H_0 = Both of the average group of students is not significantly different (identical)

 H_1 = Both of the average group of students is significantly different (not identical)

Decision-making was based on the F test and the p test. If P value < 0.05, H_0 is accepted. If P value > 0.05, H_0 is rejected.

FINDINGS

Quantitative data that were successfully collected was in the form of interval and ordinal measurements. Data are presented sequentially for the learning method, learning motivation, and entrepreneurial attitudes in craft and entrepreneurship.

Table 1 Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|----------------------|----------------------------|
| 1 | .345 ^a | .119 | .112 | 1.16765 |

a. Predictors: (Constant), motivation, learning method

b. Dependent Variable: entrepreneur attitude

Table 1 shows that the coefficient of determination (R²) was 0,119. This value indicated that the variation in the dependent (entrepreneurial attitudes) could explain the independent variables (PBL learning method and motivation,) was 11,9%; while the remaining of 88,1% of the variation was due to other variables.

Table 2 ANOVA^b

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|-----|-------------|--------|------------|
| Regression | 45.624 | 2 | 22.812 | 16.732 | $.000^{a}$ |
| Residual | 336.760 | 247 | 1.363 | | |
| Total | 382.384 | 249 | | | |

- a. Predictors: (Constant), motivation, learning method
- b. Dependent Variable: entrepreneur attitude

The significance of F of 0,000 is less than 0.05, meaning that the variables x1 and x2 simultaneously influence the variable Y

Table 3
Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | | |
|-----------------|-----------------------------|------------|---------------------------|--------|------|
| | В | Std. Error | Beta | t | Sig. |
| (Constant) | 21.765 | 1.119 | | 19.447 | .000 |
| learning method | .024 | .012 | .122 | 2.022 | .044 |
| motivation | .056 | .011 | 306 | 5.060 | .000 |

a. Dependent Variable: entrepreneur attitude

The significance of t statistic for X1 of 0.044 is less than 0.05 meaning that the variable x1 influences the variable Y. The significance of t statistic for X2 is 0,000 less than 0.05 meaning that the variable X2 influences the variable Y. The Multiple Linear Regression Test was as follows:

$$Y = a + 3,068X_1 + b_2X_2 + b_3X_3$$

$$Y = 21,785 + 0,024X_1 + 0,056X2$$

A constant value of 21.785 means that when the variables x1 and x2 have zero value, the Y value is 21.785. Coefficient X1 of 0.024 means that when the variable X1 increases by one unit, Y will increase by 0.024 units, x2 is assumed to be a constant value or zero Coefficient X2 of 0.56 means that when variable x2 rises by one-unit Y will increase by 0.056 units x1 is considered a constant value or zero.

DISCUSSION

The findings of this study showed that a teacher can successfully employ PBL as part of the learning process for various groups of students. For teacher of Craft and Entrepreneurship, PBL model is especially important for delivering material to students since the material is not focused on theory but rather on the activities that must be carried out by students. In this study, there was a lot of material that required students from class X to class XII to apply their knowledge in practice, both in groups and individuals.

A teacher plays a very important role to determine the learning model which is in accordance with the standards of competence and the basics of competence within the scope of the Craft and Entrepreneurship adaptive curriculum. The success of Craft and Entrepreneurship education depends on the teacher's skill in managing the classes and motivating students to be mature and not to despair if faced with failure when running a business that is not yet successful.

The finding of this study reinforced Socheh (2006), a teacher in SMK Negeri 2 Metro Lampung, who stated that most people were not willing to start their own business due to the learning required, unsuitable facilities and environment, and the decline of honesty and social responsibility, indirectly affecting the learning process at school. The learning process cannot be separated from the communication process in which knowledge and values are transferred. If the attitude is the learning outcome, the main key to learning is in the process of cognition.

However low the level in Bloom's taxonomy, the level of a student's cognition processes can influence his or her attitudes (Munandar, 1999). Low levels of cognition may affect attitudes, but their influence is very weak, and attitudes tend to be stable. We believe that the cognition process consistent with the levels of analysis, significantly growing and developing attitudes in line with thesis, and evaluation in the taxonomy of Bloom cognition contributes significantly to growth and development of attitudes. These levels of cognition allow students to gain the confidence to grow and develop entrepreneurial attitudes.

In turn, the process of accommodation and assimilation of knowledge, as well as experience and values become a reference when responding to objects and subjects in the environment. Information influencing attitudes really depends on the content, sources, and nature of the information concerned (Morgan et al, 1986).

The source of information is very influential on the growth of entrepreneurial attitudes. Information can be obtained not only from textbooks but also from empirical facts and teachers. The quality of information sources is very influential in the growth of students' beliefs. A teacher has an important role in fostering entrepreneurial attitudes because he/she communicates directly with the students and is still an important source of information. Therefore, an effective learning model requires a diversity of information sources so that students can make choices according to their interests, motivations, and talents. In this way, students can acquire their won knowledge and information, which they can use to analyze situations and facts and develop values that will be beneficial in their lives.

The findings of this study were supported by those of Merrill Pysicall (1995), who reported the success of PBL in developing positive attitudes, increasing awareness of differences of opinion, and improving the ability to overcome problems.

The PBL model allows students to work on authentic problems aimed at developing their own knowledge, developing inquiry and higher-level thinking skills, developing self-reliance and self-confidence. This was supported by previous research by Wulandari and Herman (2013), who showed that the application of PBL had an influence on the learning outcomes.

In our society, the teacher played a very important role in applying suitable learning methods in accordance with the standards of competence and the basic competencies in the entrepreneurial, adaptive curriculum. We found that the PBL model has an influence on Entrepreneurial Attitudes in SMK PGRI 1 Jombang.

Multiple linear regression analysis indicated that the PBL model, learning method, and learning motivation had an influence on entrepreneurial attitudes. The learning process used by the teacher to apply the PBL model with various groups of students with different level of learning method (very efficient, efficient, quite efficient, inefficient or very inefficient) and learning motivation (very high, high, medium, low, and very low). In other words, the effectiveness of the PBL model depended on the learning method and the learning motivation level. Moreover, it was expected that the use of the PBL model could improve the learning method and learning motivation and improve students' entrepreneurial attitudes. The PBL model had a positive impact on students' entrepreneurial attitudes, it is suggested to use the PBL model after knowing the learning method and learning motivation with the hope that it will be optimal and finally the learning process can be effective and efficient.

The results of the multiple linear regression analysis gave a R² value of 0.119. In other words, the application of a PBL model as learning method, and learning motivation was for 11,9% of the changes in entrepreneurial attitudes at SMK PGRI 1 Jombang.

Although this finding demonstrated that students' entrepreneurial attitudes were influenced by the use of a PBL model as learning method, and learning motivation the R² value did not explain 88,1% of the changes in students' entrepreneurial attitudes. Other factors that could affect these attitudes include the teacher's ability to teach, the condition of the school environment, students' stimulation, social-economic conditions, students' background, and parents' attitude towards their children's education. There is a need to identify which other factors affect the students' attitudes to entrepreneurial achievement in entrepreneurship learning, especially in SMK PGRI I Jombang.

CONCLUSION

PBL as a Learning Method contributes to the improvement of entrepreneurial attitudes. learning motivation also contributes to increasing entrepreneurial attitudes. Both of these variables contributed 11.9% to changes in entrepreneurial attitudes.

SUGGESTION

Based on the results of this study, it is suggested that:

- The use of the PBL model can improve students' entrepreneurial attitudes in the study of Craft and Entrepreneurship. It would be better for SMK PGRI Jombang, as far as possible, to improve the teaching and learning process by using the PBL model so that the learning process can be improved can be active, creative, and innovative
- 2. The level of student motivation and differences in student learning methods had an impact on entrepreneurial attitudes in Craft and Entrepreneurship learning. In the

first lesson, we suggested that the level of learning motivation and suitable learning method are determined by distributing a questionnaire to the students. In this way, suitable learning methods (models, media, systems, etc.) can be chosen to enable the students with low motivation to achieve the learning goals.

3. Multiple linear regression analysis found that 88,1% of the changes in students' entrepreneurial attitudes were not influenced by the use of the PBL model as learning method and learning motivation level. Consequently, in future research, it is important to identify the other factors involved. Other possible factors are the teacher's ability to teach, the school environment, talent, students' stimulation, social-economic conditions, students' background, and parents' attitudes towards their children's education.

Implications of Research Results

Theoretical implications

- 1. An entrepreneurship teacher should apply the PBL model to deliver the material to students. This material is not focused on theory, but rather on the practice. Starting from class X to class XII.
- 2. A study carried out by Socheh (2006), a teacher in SMK Negeri 2 Metro Lampung, revealed that most people were not willing to start their own business due to the learning required, unfavorable facilities, and environment, as well as the decline in honesty and social responsibility indirectly affecting the learning process at school. The learning process cannot be separated from the communication process, where there is a transfer of knowledge and values. If the attitude is the result of learning, the main key to affecting attitudes will lie in the cognition process.
- 3. PBL is a learning model that requires students to construct their own knowledge through problems.
- 4. Joyce et al. (2000) and Arends (1977) proposed that the PBL Model encouraged the growth of students' attitudes to think creatively.

Practical implications

- 1. Data analysis showed that the PBL model, learning method, and learning motivation had an influence on entrepreneurial attitudes. For this reason, various efforts to improve the competence of Craft and Entrepreneurship teacher are needed:
 - a. Teachers should have the ability to use various models, methods, and learning systems to deliver the material to students.
 - b. Teachers must be ready to face the challenges of global life because the roles and responsibilities in the future will be increasingly complex. They need to make continuous improvements and adjustments to master their competencies.
 - c. Teachers should be more dynamic and creative in developing the learning process. In the future, teachers are no longer the well-informed ones of the various information and knowledge that is developing and interacting with

- humans in the universe. Also, the future teachers are not the only ones who are smarter than their students.
- d. Teachers need to anticipate and think proactively to face the challenges of their professionalism. This requires them to update their knowledge and expertise continuously.
- 2. Data analysis showed that the PBL model, learning method, and learning motivation for 11,9% of the changes in entrepreneurial attitudes. This contribution is small, but could perhaps be increased:
 - a. Teachers should improve their ability to teach or they must be more dynamic and creative to develop the learning process. In the future, teachers are no longer the well-informed ones of the various information and knowledge that is developing and interacting with humans in the universe. Also, the future teachers are not the only ones who are smarter than their students.
 - b. The school environment should be conducive to practicing entrepreneurship through production units.
 - c. Educational institutions should provide incentives in the form of apprenticeship certificates and competency test certificates, which can be used to create when applying for jobs.
 - d. Educational institution and parents need to be aware of the initial abilities of the students.

Implications for economic education development

- 1. The development of Economic Education in Curriculum 13, especially vocational education, aims to improve the intelligence, knowledge, personality, responsibility and honesty, and skills needed for students to live independently and follow further education in accordance with their vocation. To work effectively and efficiently, and to develop skills, students must have stamina, master their fields of expertise, have basic understanding of science and technology, have a high work ethic, be able to communicate according to the demands of their work, and have the ability for self-development. The curriculum in senior high schools for each subject is divided into three groups: normative, adaptive, and productive learning.
- 2. A conducive learning environment creates a safe and comfortable atmosphere for enjoyable learning. Such an environment will encourage the realization of an active, creative, effective, and meaningful PBL, which emphasizes learning to know, learning to do, and learning to live together. The atmosphere will foster the growth of self-reliance and reduce dependence among school citizens, be adaptive and proactive as well as have a high entrepreneurial spirit (resilient, innovative, and risk-taking), not only for students but also for teachers and headteacher.
- 3. In the learning process, the main task of the teacher is to condition the environment to support the behavior changes of students. In general, the implementation of the learning process includes three things: a pre-test, competency formation, and a posttest.

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