

# PROCEEDINGS



## REORIENTING ECONOMICS & BUSINESS IN THE CONTEXT OF NATION & GLOBAL DEVELOPMENT



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## **DEVELOPMENT LEARNING MODEL OF CTL (CONTEXTUAL TEACHING AND LEARNING) APPROACH THROUGH APBL(AUTHENTIC PROBLEM BASED LEARNING) METHOD OF ENTREPRENEURSHIP SUBJECT**

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### **Abstract**

This research aimed to develop a learning model approach of CTL through the method of (Authentic Problem Based learning) APBL and learning devices at Vocational High School (SMK), the group of Business and Management with the majoring subject of Accounting effective competency skills finance to improve motivation and life skills, especially skills in solving problem. The design of this research was the development of research which was carried out in four phases: namely to define, to design, to develop, and to disseminate. And involving the experts of learning that were used as input in the development of entrepreneurial learning methods through the method of Authentic Problem Based Learning (APBL) thus it was produced inputs for manufacturing the text book of entrepreneurship. The method of research in the collection of data used the sheet of student's activity observations, written tests and questionnaires. The subjects of research were students of class XI the majoring subject of Accounting 1 SMKN 1, in Jombang and Data Technical Analysis used exploratory descriptive analysis. The results of research showed the assessment of entrepreneurship subject expert teams and learning designers expert to the results of entrepreneurship subject development through the method of Authentic Problem Based Learning (APBL) was feasibly used. that's why, it was necessary to follow up conducting comparison tests with other method to students of SMK in the field of Business and Management skills and carried out dissemination of research results to all teachers of SMK in the field of Business and Management skills who taught Entrepreneurship subjects in Jombang District in the second year to create the textbooks of entrepreneurship.

**Keywords:** Entrepreneurship, CTL, The method of Authentic Problem Based Learning (APBL)

### **INTRODUCTION**

Entrepreneurship was a skill which was needed in the 21<sup>st</sup> century, considering the limitations of natural resources support for the welfare of world's

population was growing and increasing and getting competitive. Soul and spirit of entrepreneurship that are formed and honed well since teenagers would be able to generate innovative human resources who were capable of freeing the nation from dependence on natural resources. Entrepreneurship was needed of course that gave a significant impact on the increasing of economic output in supporting the welfare of nation through the creation of real work.

Curriculum 2013 equipped students in secondary education with entrepreneurial abilities which were born and grow up in the real sector. Beginning with the observation of the existing products in the market along with their characteristics, a product form component structure analysis, structural analysis and a series of processes as well as the necessary equipment, including market analysis, costs and prices. To support the integrity of student's understanding was not only able to produce creative but also realize the real work in the form of prototypes and continued until the market creation activities to realize the economic value and a variety of activities.

Entrepreneurship subject was regarded as a subject of unattractive option, even considered unimportant and felt useless for academic development. To understand the content, meaning, and purpose of the lesson hasn't yet been not understood in detail, The Principle of entrepreneurial learning hadn't given benefit for the development of the student's psychiatric. Entrepreneurship subject was not a lesson that in the national examination so that the students thought this lesson was not so important. In the fact entrepreneurship was an important lesson because students could explore themselves to be creative, innovative and independent Indonesian human.

The paradigm of school autonomy by implementing management school based on quality improvement was one of the solutions to achieve school quality target. In the case was the implementing the curriculum 2013 and improving the quality of schools, Sharing through this dialogue could provide effective motivation and innovation for teachers to create the condition of fun learning, exciting, and educating (Enjoyable Learning) with using the learning strategic of Contextual Teaching and learning. Giving entrepreneurship subjects in Vocational High School (SMK) was intended to provide more score to the vocational school

graduates. Namely, in order that they could have opened their own jobs or being a young entrepreneurship if they had completed and graduated from education .

This was the role of an entrepreneurship teacher which was raised to provide supplies to vocational high school students in order to have an understanding of business world in daily life especially in society environment , so that they could be self-employed , of course it was adapted to their skills and as well as they were able to implement the program of work behaviors that are achievable in their lives . In this case that it became the purpose of entrepreneurship subjects which had been described in the curriculum.

Entrepreneurship Teachers had to have a variety of methods and diverse learning systems to deliver these methods mentioned to students .This subject was not focused on theory and more on practical applications that must be implemented by the students. Start class I (X) to Class III (XII) there are many materials that require vocational students into contact with real practical applications, either in groups or individual .The role of teachers was very important to the learning method that was suitable according to SK (Standards of Competence) and KD (Basic Competence) that was available in the scope of adaptive entrepreneurial curriculum.

The first step that needed to be addressed firstly was to improve the entrepreneurial learning, because it had a very important role in growing attitudes entrepreneurship .Through entrepreneurial learning, so that the knowledge (cognitive), attitudes (affective) and skills (psychomotor) self-employed person could be improved.

With the selection of appropriate method and media, the entrepreneurial learning which was done would be interesting, it was not boring and easy to understand, so that would motivate students to learn entrepreneurship. With the students are motivated to learn entrepreneurship, so that the students would have the competence of cognitive, affective and psychomotor in entrepreneurship.

Considering the importance of motivation to learn, the development of life skills in a learning process at Vocational High School ( SMK ), it was necessary for the development of the learning model that can help teachers develop motivation and life skills, one of the efforts that could be done was through learning with the



method of Authentic Problem Based Learning (APBL). This method was done because the learning with the method of Authentic Problem Based Learning (APBL) is a method which centered on student that stimulated students to acquire and applied knowledge and skills that they needed, included solving problems (Barrows & Neo Lynda, 2007: 1). The method of Authentic Problem Based Learning (APBL) was designed to provide the knowledge and skills which were needed for the job, the ability to continue learning new thing that was needed in solving new problem and challenges, as well as have the ability to continue growing. ((Barrows & Neo Lynda, 2007: 1). Therefore, the implementation of Authentic Problem Based Learning (APBL) was expected to be able to increase ability to enhance the student's problem solving in the field of entrepreneurship subjects.

Learning theory that supported this learning model is a constructive learning theory. According to constructive learning theory, the most important principle in educational psychology that teachers did not only provide knowledge to students, but also students had to build their own minds. Another study theory which supported was the teaching method of Dewey. According to John Dewey reflective method in solving the problem, which was a process of active thinking, which was based on careful thinking process towards a conclusion (Nur, 1998).

According to the research results that was done by Yuliati (2012), learning with the method of Authentic Problem Based Learning (APBL) could improve learning outcomes in the aspects of cognitive, affective, and psychomotor. The increases mentioned were happening because APBL facilitated students to learn actively, independently by using physical phenomena directly. The research of Susiana (2012) stated that teaching of science by using Authentic Problem Based Learning (APBL) could enhance creativity, interpersonal relationships and mastery of concepts. Through the reflection of their learning experience was motivated to produce higher quality work, in the hopes of learning outcome which was not only in terms of cognitive knowledge, but also improved the motivation and life skills of students such as personal skills, ability to gather information, ability to communicate orally and in writing as well as problem solving skills.

Responding to the challenges above so that it was developed the method of Authentic Problem Based Learning for entrepreneurship at Vocational High School (SMK), it was expected to be capable of being used to help students in solving the problem of entrepreneurship subjects at Vocational High School in Jombang.

### **The formulation Of Problem**

How to develop a model of learning by CTL approach (Contextual Teaching And Learning) through the method of APBL (Authentic Problem Based Learning) on the subjects of entrepreneurship at Vocational High School in the group of Business and Management Department with the subject of effective accounting skills competency to improve motivation and life skills, especially skills in solving problem.

## **LITERATURE REVIEW**

The approach of Contextual Teaching and Learning (CTL) in entrepreneurial learning.

### **1. The Character of Entrepreneurship Subject**

Entrepreneurship was a subject of vocational subjects, namely the lesson which was used to give knowledge, attitude and work skills for their students. Expected competencies were able to do productive economic activities after they enter the workforce world. Business success was highly dependent on the market (consumers). Market consists of the internal market, namely the employee of organization and the external market was a buyer of products that we sell. Therefore, it was in teaching entrepreneurship subjects consider the characteristics or traits such as the following: a) Learning by doing means that the principle of entrepreneurial learning was learning by doing, so that students have a practical learning experience, b) As far as possible what was learned in the same school with the work that would be done in the work world, so that the knowledge, attitude and practice skills which were learned were not different from what would be done in real terms in the community, c) Operational practices experience which was learned has a greater portion than the conceptual. cognitive knowledge.

As subject that has the characteristics promoting the social and psychological needs of the human psyche, so that learning Enterprise ideally also

uses humanist approach. Namely learning that puts students as human beings who are composed of body and soul. The goal of learning process as well as become a vehicle for human to respect human, because in entrepreneurship, later they will be dealing directly with others as job partners.

Humanist approach is a method that was able to meet the needs of students as human beings. Human's needs, according to Maslow (1980) consisted of five kinds of needs which could be identified in the learning needs at schools, namely: (1) The need for physical or need of physiology, namely the need for the availability of infrastructure and the complete and comfortable study ; (2) The need for security or the need of safety, the safety needs in learning that is free from intimidation and pressure / threats, (3) The needs for Love affection or the needs of love and belonging, namely attention and fair treatment of teachers, (4) the need of self-esteem, namely the need to obtain praise and appreciation for the good opinion, (5) The need for self-actualization, namely the need for the opportunity to appear participative in class to express their opinions and thoughts. Apparently, the approach was able to meet human needs humanely in entrepreneurial learning process was the approach of CTL (Contextual Teaching and Learning).

## **2. The Approach of CTL**

The approach of learning and teaching entrepreneurial process that was able to give satisfaction to the students according to their needs so that the experience could be applied in the job world is the approach of CTL. CTL approach was the approach of learning where teachers relate the material taught with real-world situations, and encourage the students to be able to connect to their knowledge which is taught with their daily lives as a member of family and society. With this concept, learning outcomes were expected to be more meaningful for students. The learning process takes place naturally in the forms of work activities and experience, and it was not just a transfer of teacher's knowledge to students. In the approach of CTL mentioned learning is more concerned with process than results. At that context, students needed to understand what it meant to learn, what the benefits of learning , in what status they were and how to achieve it. They were aware that what they were learning was useful for later life. That's why students take position as someone who requires life provision in the future. They learned

what was beneficial to him and trying to reach it through the teacher as the director and counselors.

In the contextual class, the teacher's task was to help students achieve learning goals. More teachers serve as mentors than provide information. A knowledge and skills come from the results of finding by themselves instead of what the teacher said. Such contextual approach is developed with the aim of learning in order to get more productive and meaningful.

### **3. The reasons of CTL approach was chosen as a learning strategy**

The approach of CTL is chosen for a learning Entrepreneurship because of following up :

- a. Required a more empowering approach to students. As far as learning the entrepreneurial is still dominated by the view that knowledge was the facts must be memorized. Class was still dominated by teachers as main source of knowledge and discourse becomes the primary choice learning method . Therefore it was required a new learning strategy that empowers students more.
- b. Required a constructive approach, . Knowledge is not a fact and a concept that was ready to welcome the students, but something has to be constructed solely by students .Teachers do not require students to memorize facts but students are expected to learn through "experience" by themselves.

### **4. Rationale Basic in Contextual Learning**

1) Learning process.

- a. CTL based on his thinking that the learning process was not just memorize, but students had to construct knowledge in their own minds.
- b. Students learn from the experience, where students record their own patterns of new knowledge and they were not given away from the teacher.
- c. That knowledge could not be separated into separated facts, but reflect the skills that can be applied.
- d. Students need to get used to solving problems, finding something useful thing for them and getting with ideas.

2). The transfer of Learning.

- a. Students learn from their own experience, it was not from giving of others.
- b. Knowledge and skills were expanded from a limited context, little by little.
- c. Students needed to know to what they learn, and how they used knowledge and skills.

3). Students as learners.

- a. Students had a tendency to learn in a particular field and he had a tendency to learn new things quickly.
- b. Learning strategy was important, let alone for things that are difficult to learn to be a very



important strategy. c. The teacher's role was to help connect the new one with the thing that they have already known before. d. Teacher's job was to facilitate in order that new information was meaningful and provide opportunities for students to find and implement their own ideas.

### **5. The Components of CTL.**

Learning with CTL approach had to apply the 7 components of the pillars CTL namely: 1. Constructivism, was a learning significantly, meaningfully, students constructed their own knowledge and give meaning through real experience. There were 5 things that you had to pay attention and considered in constructive learning, namely: a. Activating prior knowledge that they had (activating knowledge) b. Obtaining new knowledge (acquiring knowledge) c. Comprehending knowledge (understanding knowledge) d. Practice knowledge and experience (applying knowledge) e. Reflecting on the strategy of knowledge development (reflecting knowledge) 2. Inquiry, meant that learning by finding his own knowledge and new skills, he didn't not merely memorize and remember it. 3. Questioning, meant that learning had to develop curiosity by asking questions or dig up information 4. Learning community, meant that learning by cooperating with others mean that the result of learning gained from sharing with friends. 5. Modeling, meant that learning on student by providing models or examples which could be duplicated by students. 6. Reflection, meant that learning which was capable of making students reflect knowledge / new skills to improve or enrich knowledge previously. 7. Authentic Assessment. Meant that the actual assessment with a variety of data to determine the level of students' learning progress.

### **6. One of teaching Entrepreneurship methods In accordance with the principle of CTL.**

The method of APBL (Authentic Problem Based Learning) was learning method that involve active participation of students (divided into several small groups) to solve actual problems in the business world (authentic problem) which had been prepared carefully by the tutor (teacher) and provide student opportunity to find themselves the answer of problem and present it in the class so that invent the concept of the learning experience.

The steps of APBL method as follow up:

- 1) Forming a group. Teachers form groups and define roles all members in the group, as a discussion leader, secretary and members.
- 2) Establishing a tutor. Teachers formed tutor (who has understood correctly about the problem which would be studied) to assist in informal discussion groups.
- 3) Submitting a problem. Teachers delivered "business problems" that had to be discussed by each group as a focus for student learning.
- 4) Investigating. Students conducted investigations (searching for information, exploration, experiment, and choosing approach to solve the problem that they discuss.
- 5) Clarifying problem. Tutor's guide the group for reflection about a plan of action that would be done to solve the problem.
- 6) Identifying problem. Students summarized related problems and determine the main cause of these problems.
- 7) Discussing diagnostics. Students discussed the fact-finding strategies and the sources of information that had be searched to find the facts. mentioned To tutor ,students report actual sources that they used to solve problems.
- 8) Making decision. Students compiled a final decision about solving problems. Tutor constantly checking and testing the decisions which was taken by the students.
- 9) Producing. Students wrote down the solution to the problems that had been solved together.
- 10) Presenting. Students made presentations in plenary to convey the idea of solving the problems that they had generated in group discussions.
- 11) Developing a concept map. After preparing the students present a summary of integrities about steps and problem solving results in the form of schematic drawings or charts.
- 12) Assessing. Students learned to assess their own success of learning . In addition the group also got an appraisal and criticism from other groups and from tutors.

## METHOD

This research was a Classroom Research and Development Research. In this research, the development of teaching materials used a model 4-D (Four-D Model) which consists of 4 stages, which included defining, planning (designing), developing, and dissemination (disseminating). (Thiagarajan, Semmel, and Semme: 1974). The phasing mentioned as follow up:

- 1) Stage 1: Defining, which meant to determine and define the needs of teaching, through a series of analytical work, and ended with a set of goal pursuit.
- 2) Phase II: Designing, which meant to design the prototype of teaching materials. The selection of formats and media for teaching materials and production. The design of teaching materials included: syllabus, lesson plans, teaching modules, student's activity sheet (LKS), and student's assessment sheets (LP).
- 3) Phase III: Developing. The development phase aimed to produce the first draft of the revised learning device based on the input of the reviewers. After learning tool was revised based on the input of the reviewers, then result draft II. Furthermore testing small groups of 5-10 students for feedback, and look for reliability of the instrument that was used, so that increase a draft III. Test piloted teaching material (draft III) on The real class. Based on test data and input in the classroom, to revise and produce a draft IV or final text. The data which was obtained in the trial test in the next class was analyzed as materials for the report.

#### **The subjects of research**

The subject of this research was Public Vocational High school ( SMK Negeri 1 ) in Jombang, class XI The majoring subject of finance with the competence of Accounting skills.

### **The instrument of research**

The research instrument used were a sheet of learning implementation observation in the class, a sheet of student's activity observation in the classroom, student's achievement test covering (written test and practice tests, and assignments), as well as the student's response.

## **THE RESULTS AND DISCUSSION**

### **The Assessment Result Of Subjects Expert Team And Learning Designer**

The following it was presented the results of the data analysis: 1) Learning implementation by applying the method of Authentic Problem Based Learning (APBL), 2) The Activities of Students in Learning by applying the method of Authentic Problem Based Learning (APBL), 3) The Value of Student's Entrepreneurship Subject, 4) The overall value and Standard Learning Student's Mastery, 5) The questionnaire of Student's response against The Application of Assessment method of Authentic Problem Based Learning (APBL)

- 1) The Learning implementation by applying the method of Authentic Problem Based Learning (APBL) Based on research an average score of preliminary activities at meeting I as big as 4,1, the meeting II as big as 4,4 and meeting III as big as 4,5, meeting IV as big as 4.5 showed both of criteria at this stage of core activities of meeting I was 4, 1, meeting II was 4.2 meeting III was 4,6 and the meeting IV was 4.7. The last activities from the meeting I until the meeting IV indicated good categories.
- 2) The activity of Students in Learning by applying the method of Authentic Problem Based Learning (APBL) The average scores of student's activity in learning to analyze the business opportunities of vegetable and animal materials processing into local typical food based on market observations in the local area by applying the method of Authentic Problem Based Learning (APBL) at meeting I as big as 4,1, meeting II as big as 4.1, meeting III as big as 4.6 and meeting IV as big as 4,7 At meeting I until meeting IV indicated good categories
- 3) The Student's score of Entrepreneurship Subject and overall scores and Student's Learning Standard Mastery, Entrepreneurial score was an average

of students increased, on meeting I the average of score was 81.64, meeting II was 82.10, meeting III was 82.53 and meeting IV was 82.89. While the score of teachers at meeting I was 82.23, meeting II was 82.25, meeting III was 82.92 Meeting IV was 82.97. Over all average scores, at meeting I was 81.94, meeting II was 82.20. meetings III was 82.48 and, meeting IV was 82.56. In addition to the average score was also seen the score of student's learning completeness. According to the Education Standard National Agency of student's learning completeness Standard score was 75. At meeting I until meeting IV, all students completed learning So that it could be said learning outcomes by implementing the Learning method of Authentic Problem Based Learning (APBL) to achieve the standards of learning mastery.

- 4) The Questionnaire of student's Response to the Assessment method of Authentic Problem Based Learning (APBL) Student's Response Questionnaire was stated that 50% students strongly agreed and 35% students agreed with the method of Authentic Problem Based Learning (APBL) was a new thing for me with the method, As many as 60% students agreed that compose the problem of technique in the search for business opportunities within the local typical food products in this area was valuable experience, and 25% strongly agreed. Half of the students (50%) strongly agreed that Summarizing the problem of the technique in the search for business opportunities of local typical food products prepared in a good local environment, and 45% agreed as to summarize the problems of the technique in the search for business opportunities within the local typical food products in this area makes motivation students to be more creative in their work.

Drafting tasks by the methods of Authentic Problem Based Learning (APBL), required the instructions and clear criteria as many as 60% students agreed that discusses about problem-solving strategies about business opportunities of local typical food products and techniques in seeking business opportunities of local typical food products in this area was very helpful. 50% students agreed to do a presentation to convey the idea of solving the problem that has been found was a very pleasant and thus constitute a problem of technique in the search for the

business opportunities of local typical food products in the area was not adding to the burden of learning and useful for students. It was also supported by 60% strongly agreed with the problem of analyzing the business opportunities of vegetable and animal materials processing into local typical food in this area, students felt to get a chance to show creativity in making the management of plant and animal materials to be local typical food. And 55% agreed that the assessment was done by peers.

Based on data analysis of test experts that all components of item assessment for learning model product development result of Authentic Problem Based Learning (APBL) on entrepreneurship subjects was categorized well and reasonable to use.

## CONCLUSIONS AND SUGGESTIONS

- 1) The result of entrepreneurship learning method development through the method of Authentic Problem Based Learning (APBL) was worth to use furthermore it was developed based on the results of the analysis of students and teacher's need a written test and practice, learning objectives, instructional material components.
- 2) The product component of entrepreneurial learning method development through the method of Authentic Problem Based Learning (APBL) which has been tested through four stages and revision, to teacher's subject, instructional design experts, where the assessment was a good average.
- 3) The results of entrepreneurial learning development through the methods of Authentic Problem Based Learning (APBL) would form an entrepreneurial attitude and competence of students' soft skills in student's problem solving ability on the subjects of entrepreneurship.

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