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## Development of E-Millennial Entrepreneur Learning Model for Entrepreneurs Learning of Vocational School

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### ABSTRACT

This study aims to develop an entrepreneurial learning model that can achieve the competencies expected at SMK Negeri 4 Pekanbaru. This research is a Research and Development using the Four D model. The Define phase deals with needs analysis which results in that teachers and students need a learning model that can help students to increase creativity in creating a product. The Design Phase is in the form of developing an initial learning model. The Development Stage is a learning model that has passed the validation test. Disseminate stage is the application of the model carried out in 6 (six) expertise programs in SMK 4 Pekanbaru. The results of the development in the form of learning activities given by the teacher to students to think about the types of products to be made, then students make the initial design for these products. After that students think about the materials needed, students calculate the funds needed, students determine the selling price for each product produced and the product can be promoted through the blog production unit of SMK Negeri 4 Pekanbaru. The results of the implementation carried out in 6 (six) skills programs show that the development of learning models named E-Millennial Entrepreneur Learning can improve the cognitive, affective, and psychomotor aspects of students.

## 1. Introduction

The teacher has a very important role in the learning process. In general, educators tend to feel safe by using existing learning models, such as using conventional learning models or lectures. This makes it difficult for students to create ideas or skills they have. Because students only focus on the explanation given by the teacher. Teachers are reluctant to innovate in using better and interesting learning models. Therefore, all efforts to reform in the field of education have been made,

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such as curriculum renewal and the application of learning models used by teachers during the teaching and learning process.

Sinta (2019) said that the learning process was organized to motivate students to be active and increase creativity, independence, and focus on students' physical and psychological development in an interactive, inspiring, fun, and challenging way. To achieve this goal, teachers are required to be able to choose appropriate and innovative learning models in presenting lessons. Suprijono (2009) said that by using innovative learning models in the classroom, teachers can help students get information, ideas, skills and ways of thinking and expressing ideas.

In the process of implementing entrepreneurial learning students should more actively learn to develop their creativity to understand the lesson and be skilled in solving problems. Frydenberg, et al (in Melva, 2020) also stated that to face learning in the 21st century, everyone must have critical thinking skills, knowledge, and digital literacy skills, information literacy, media literacy, and mastery of information and communication technology (Amirullah et al., 2018).

The increasing success of entrepreneurship lessons in Vocational High Schools (SMK) is marked by the increasing entrepreneurial attitudes of their students. Therefore we need a more real learning model, which is to give them life skills. Life skills in entrepreneurship education is an interaction of various knowledge and skills that are very important possessed by students so that they can live independently as an entrepreneur. According to Fadlullah (2011) there are four pillars of education in carrying out entrepreneurial learning as life skills that must not be abandoned, namely learning to know (learning to know entrepreneurship), learning to do (learning to do entrepreneurial activities), learning to be (learning to practice entrepreneurial activities), and learning to live together (learning to be with others in social interactions in entrepreneurship).

Basically, the characteristics of an entrepreneur are having confidence and having better abilities than others. Arifin (2012) states that there are 17 values developed at school that show the characteristics of an entrepreneur namely (1) independent; (2) creative; (3) dare to take risks; (4) action oriented; (5) leadership; (6) hard work; (7) honest; (8) discipline; (9) innovative; (10) responsibilities; (11) cooperation; (12) never give up; (13) commitment; (14) realistic; (15) curiosity; (16) communicative; and (17) strong motivation for success. Thus an entrepreneur must be able to create something new (creative), have the ability to take risks and carry it out well (serious, persistent, persistent, and persevering). Therefore, learning entrepreneurship should not only transfer knowledge, but more important is to instill an entrepreneurial spirit and have skills in entrepreneurship.

Sumarno et al. (2019) found that Industrial Era 4.0 had a negative impact on the loss of various jobs, but on the other hand it had a positive impact, namely the emergence of business and employment opportunities. In Industrial Era 4.0, human resources are required to have the ability to create, innovate, think critically, and collaborate and be confident. Entrepreneurship education provides knowledge and skills and develops attitudes that can be a solution for the impact

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of the Industrial Age 4.0. Knowledge, skills, and entrepreneurial attitudes will shape people according to the Industrial Age 4.0, which is the ability to create, innovate, think critically, collaborate, and be confident. This ability will be able to achieve opportunities that arise to replace lost work. At the level of pre-school education, basic education and general secondary education (SMA/MA), entrepreneurship education must be emphasized more on developing entrepreneurial attitudes and knowledge. At the level of vocational secondary education and higher education, entrepreneurship education must be emphasized more on the development of entrepreneurial skills. Effective implementation of entrepreneurship education for the Industrial Age 4.0 requires synergy and integration between subjects or subjects, teachers / lecturers, level of education, and among various stakeholders on an ongoing basis.

While the results of research by Yuriani et al. (2012) found that entrepreneurial learning needs to be oriented towards efforts to enlarge the portion of affective aspects in entrepreneurship, for example fostering an entrepreneurial spirit, the ability to find opportunities, and the ability to make decisions. The entrepreneurship learning process should be done with an experiential learning approach. Samsudi (2014) found that the development of productive program learning models that focus on technical (productive) by creating goods or services, emphasizing project work or assignments that direct students to complete a product, besides applying assessment techniques in the process and results (products ) learning.

Based on the results of preliminary observations in the form of interviews conducted with teachers of entrepreneurship subjects at SMK Negeri 4 Pekanbaru to obtain information about students' creativity in making a product. According to the teacher of creative products and entrepreneurship class XI there are some problems in the entrepreneurship learning process that are not fully going well. Bearing in mind that entrepreneurship learning objectives are expected to foster entrepreneurial attitudes, think creatively and innovatively and dare to take risks. However, conditions in the field indicate that the lack of student creativity in creating ideas creatively and innovatively, students have not been able to glance at the business opportunities that exist in their environment, and students have not dared to take risks in entrepreneurship. So that the products produced have not been widely marketed, the products produced are only marketed offline, namely through school cooperatives, and the products produced by students are only marketed once a year, namely during the distribution of report cards at the end of the semester. For this reason, it is necessary to study the learning model in the eyes of entrepreneurship at SMK 4 Pekanbaru.

The purpose of this study is to analyze the entrepreneurship learning model at SMK Negeri 4 Pekanbaru and find the development of entrepreneurship subject learning models that can achieve the expected competencies.

The implementation of entrepreneurship education in SMKs according to the Ministry of Education and Culture Curriculum Center of the Ministry of National Education can be done through various efforts which include: (a) instilling

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entrepreneurship education into all subjects, teaching materials, extracurricular, and self-development, (b) developing educational curricula that provide entrepreneurial education content that able to increase understanding of entrepreneurship, fostering entrepreneurial character and skills, (c) fostering an entrepreneurial culture in the school environment through school culture, and supported by local content.

Education as a learning process is indeed not enough to just pursue the problem of intelligence. Various potential learners must be able to develop optimally. Because in learning students must be able to achieve the competencies that have been determined. In these competencies there are several aspects regarding mastery of the material. This is in line with the 2013 curriculum which emphasizes the attainment of attitudes, knowledge and skills competencies, all of which are summarized in the competencies of hard skills and soft skills.

Cognitive ability (Cognitive Domain) according to Bloom (in Ginting: 2008) is a process that occurs internally within the nervous system of humans which is usually measured by thought or reason, which consists of:

1. Knowledge (Knowledge), includes the memory of things that are learned and stored in memory.
2. Comprehension, refers to the ability to understand the meaning of material.
3. Application, refers to the ability to use or apply material that has been studied.
4. Analysis, refers to the ability to describe the material into its components or factors.
5. Synthesis (Synthesis), refers to the ability to integrate concepts.
6. Evaluation refers to the ability to give consideration to material values for a particular purpose.

Affective ability according to Bloom (in Ginting: 2008) consists of the ability to:

1. The ability to receive (Receiving), refers to the volunteerism and ability to pay attention to the response to the right simulation.
2. Welcome (Responding), is the attitude of students in providing an active response to stimuli that come from outside.
3. Award (Valueving), refers to judgment.
4. Organizing, refers to the unification of values as a guide and as a guide in life.

Psychomotor Domain (The Psychomotor Domain), is the ability related to movement behavior, motor ability and physical ability of a person. According to Bloom (in Ginting: 2008) psychomotor abilities consist of:

1. Perception, including the ability to conduct proper discrimination between two or more stimuli.
  2. Readiness (Ready), includes the ability to put himself in a state of starting a movement.
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3. Guided Response (Guidance Response), includes the ability to do something a series of movements in accordance with the example given (imitation).
  4. Familiar movements (Mechanical Response), including the ability to carry out a skill.
  5. Creativity, including the ability to give birth to new patterns of movement.

According to Adi (in Suprihatiningrum, 2013) said that the learning model is a conceptual framework that describes the procedure in organizing learning experiences to achieve learning objectives. Winataputra (in Suyanto, 2013) means that the learning model is a conceptual framework that describes procedures systematically in organizing learning experiences to achieve learning goals and serves as a guide for teachers in planning and implementing teaching and learning activities.

The learning model serves as a guide for instructor designers and teachers in designing teaching and learning activities. The function is specifically a learning model according to SS. Chauhan (in Ngurwan, 2010) as follows:

1. Guidelines. The teaching model can serve as a guide that can explain what the teacher must do. So teaching is a scientific, planned, and purposeful activity.
2. Curriculum development. The teaching model can assist in the development of curriculum for class units and classes in education.
3. Establish teaching materials. The teacher in preparing teaching materials in detail to help students change and student personality.
4. Help improve teaching. The teaching model can help the learning process more relative.

The entrepreneurship learning model according to Suherman (2010) says that entrepreneurial learning begins with the preparation and procurement of learning material for theory, practice and implementation. After the preparation and procurement of learning material is completed, an entrepreneurial learning process is carried out with the main objective of filling the cognitive, affective and psychomotor domains of students. At the same time as the learning process progresses, consultation vehicles are provided, especially for pragmatic matters to complete the learning process that is directed to fill the cognitive, affective and psychomotor domains. Besides that, the consultation vehicle is expected to be able to strengthen 4H which includes Had (head / thoughts filled with knowledge), Heart (hearts / feelings filled with social and economic fourism), Hand (hands / skills provided by production techniques) and Health (health is given the ability to anticipate).

## **2. Methodology**

This research is a Research and Development using the Four D (4-D) model. Triangarajan in (Trianto, 2009) said that research into the development of the 4-D model was carried out in four stages, namely: Define (covering) objectives analysis of entrepreneurship subjects, facilities and infrastructure analysis,

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analysis of students and teachers. The Design included the competence that wants achieved and identification of learning models. The Development included validation tests conducted by model design experts. The Disseminate included skills programs. This research was conducted in Pekanbaru, Indonesia with a research place in SMK 4 Pekanbaru.

The type of data in this study was qualitative data obtained from criticism, suggestions and comments from experts on the development of learning models and quantitative data obtained from questionnaires given to validators to assess the development of models and to measure student achievement after using the development of learning models. Data collection techniques used in this study was using the method of observation, questionnaires and documentation. The object of this study was the learning model and respondents in this study were entrepreneurship subject teachers and students of SMK Negeri 4 Pekanbaru.

### 3. Results and Discussion

Development research conducted at the defining stage includes an analysis of the objectives of entrepreneurship subjects based on Permendikbud Number 07 of 2018 saying that the goal of transforming entrepreneurship subjects into creative product subjects and entrepreneurship aims to encourage learning that produces creative products and enhance attitudes and skills in entrepreneurship . Analysis of facilities and infrastructure is carried out to support the learning process. Besides the results of the analysis of students required a learning model that can help students in marketing the products that have been made, because so far the products produced by students are only marketed through school cooperatives and only marketed once a year during the distribution of semester report cards.

The planning stage is carried out to design learning models of entrepreneurship subjects which in this case is seen from the competencies to be achieved contained in the RPP and Syllabus and identification of learning models is carried out to get the picture that SMK Negeri 4 Pekanbaru requires learning models that can improve cognitive, affective and psychomotor aspects and learning models that can promote a product. In this case the researchers developed the E. Millennial Entrepreneur Learning learning model on entrepreneurship subjects at SMK Negeri 4 Pekanbaru. The syntax of the E. Millennial Entrepreneur Learning Learning model is shown in Table 1.

Table 1. Syntax of the E. Millennial Entrepreneur Learning Model

Phase	The model applied at SMK4	Development Aspects
Phase 1 (Learning Opener)	➤ The teacher conveys the learning objectives to be achieved	
Convey students' goals and motivation	➤ Teachers provide motivation to students	

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Phase 2 (Core Activities: Cognitive) Present Information	➤ The teacher presents information to students by means of demonstrations or through reading material about the product to be made	➤ The teacher provides opportunities for students to see the types of products through the internet.
Phase 3 (Core Activities (Effective) Organize students into study groups	➤ Teachers form groups and determine what products will be made by students	<ul style="list-style-type: none"> <li>➤ The teacher directs students to form study groups, after that the teacher gives the opportunity for each group to think about and gather ideas about what products will be made, then students make product designs and students think about what materials will be used and students calculate the funds needed to make the product</li> <li>➤ The teacher observes and evaluates students' attitudes</li> </ul>
Phase 4 (Core Activities: Psychomotor) Guiding study and work groups	➤ The teacher guides the study groups when making products	<ul style="list-style-type: none"> <li>➤ By monitoring the teacher, students make products with their respective groups</li> <li>➤ Students recognize and create one of the social media that is used as a tool to promote the product that has been produced</li> <li>➤ The teacher monitors students in marketing products</li> <li>➤ The teacher observes and assesses the process of student skills</li> </ul>
Phase 5 (Closing Learning) Evaluation	➤ The teacher evaluates students' cognitive and skills	➤ The teacher evaluates each student's performance, starting from finding ideas outlined in a conceptual framework, designing designs, making products to marketing products
Phase 6 (Closing Learning) Giving awards	➤ Teachers reward each group with good results	➤ The teacher gives rewards to each group that has an attractive product design.

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At the development stage, the validation assessment is done by the model designer, learning model expert and instructional media expert. Based on the comments and suggestions from the validator, it was obtained the design of the E. Millennial Entrepreneur Learning model based on the learning theory used by Eman Suherman (2010). Form of the E. Millennial Entrepreneur learning learning model as shown in Figure 1.

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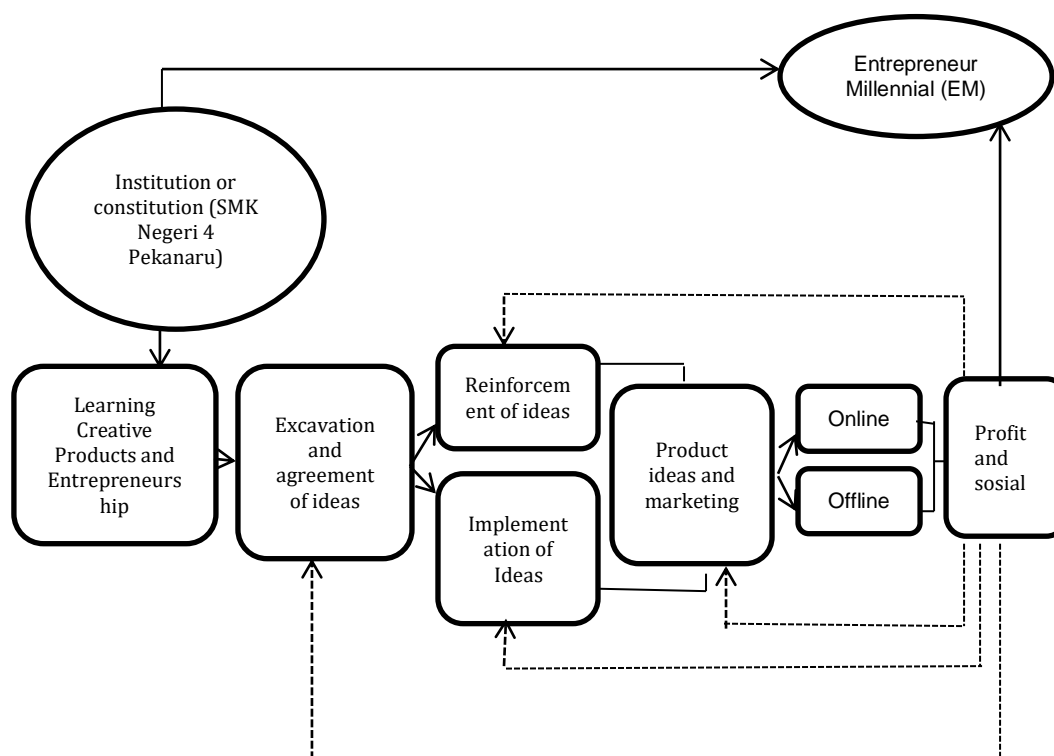


Figure 1. E. Millennial Entrepreneur Learning Model

From Figure 1, it can be seen that the Vocational High School (SMK) in entrepreneurship subjects focuses on product design in accordance with the student's expertise program. In implementing the use of the E. Millennial Entrepreneur Learning model. There are several steps that must be done by the teacher in the learning process. These stages consist of:

1. The stage of excavation and agreement of ideas  
The teacher forms groups of 5-6 students. Then students together with their groups think and collect ideas to determine what products will be made. Students can pour these ideas into a conceptual framework and the teacher gives an assessment to students.
2. Strengthening ideas  
At this stage students can make product designs.
3. Implementation of ideas  
At this stage students can determine what materials are needed in making a product, students calculate the funds needed and students determine the selling price of the product. By monitoring teacher students can make products and teachers provide assessments.
4. Product ideas and marketing  
In this final stage, products produced by students can be marketed through students' social media accounts and promoted through <https://unitproduksismkn4.wixsite.com/unitproduksismk4>

At the Disseminate stage (deployment) the application of model development is carried out at SMK Negeri 4 Pekanbaru. The trial phase was carried out for 6



majors, obtained data based on questionnaire sheets given to students with 15 items of statements regarding the E. Millennial Entrepreneur Learning learning model. This questionnaire sheet is given to students after applying the E. Millennial Entrepreneur Learning learning model.

The recapitulation results are based on questionnaire sheets given to students regarding the use of the E. Millennial Entrepreneur Learning Learning model in SMK Negeri 4 Pekanbaru with 6 majors of expertise will be discussed in Table 2.

Table 2. Recapitulation of the use of the E. Millennial Entrepreneur Learning Learning model

Department	Cognitive	Category	Affective	Category	Psychomotor	Category
TB	78,13%	Well	71,87%	Well	62,5%	Well
KKBT	56,67%	Very good	53,33%	Very good	86,67%	Well
DKV	75,86%	Very good	51,72%	Very good	79,31%	Well
K3R	75%	Well	64,29%	Well	71,42%	Well
AK	73,08%	Well	76,92%	Well	61,54%	Pretty good
TKJ	66,67%	Well	63,33%	Well	53,33%	Well

Based on Table 2. It can be seen that in the fashion department (TB), Batik and Textile Creative Crafts (KKBT), Visual Communication Design (DKV), Wood and Rattan Creative Crafts (K3R), and Network Komputer Engineering (TKJ) are in the good category in improving cognitive, affective and psychomotor aspects. But in the Accounting department, it was seen that 61.54% were in the quite good category. This means that the use of the E. Millennial Entrepreneur Learning learning model can only improve the cognitive and affective aspects of students. But it has not been able to improve the psychomotor aspects of students majoring in accounting.

#### 4. Conclusion

Based on the results of research conducted, at the stage of analysis of the needs of students towards the entrepreneurial learning model used that students need a learning model that can improve cognitive, affective and psychomotor aspects, as well as assist students in marketing each product that has been produced. In the development of the E. Millennial Entrepreneur Learning learning model developed, it was declared feasible to use. This is based on the results of the validation by the validator of the model designer, the learning model expert and the learning material expert 'very well' or worth testing in the classroom. In the development trials conducted in 6 majors in SMK Negeri 4 Pekanbaru based on questionnaire sheets provided to students with 15 statement items, it was found that the use of the E. Millennial Entrepreneur Learning learning model used was in the 'good' category. It can be seen that the learning model of E. Millennial Entrepreneur Learning can improve the cognitive, affective and psychomotor aspects of students and by using the learning model of E. Millennial Entrepreneur

Learning students can market products through the blog production unit of SMK Negeri 4 Pekanbaru.

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