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## The Development of Articulation Learning Model Oriented to Student Activity in Economic Subjects at Pekanbaru Plus Binabangsa High School

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### ABSTRACT

Not all students have the ability to speak or to express opinions in public well, and not all students are able to engage in the learning process with a student centered approach. Therefore, the learning model with a student centered approach should still be juxtaposed with the considered percentage of lecture method (teacher centered approach). This research aims to produce an Articulation learning model development oriented towards student activities. The data analysis was referring to the ISMAN model which consists of the stages: input, process, output, feedback, and learning. Based on the validity test to the validator, the Articulation development model is declared suitable for the Economics learning process. The students responses to the utilization of the Articulation development model obtained an average percentage of 88.62% in the category of very effective.

## 1. Introduction

Education is defined as an effort from various related parties consciously and planned in creating an atmosphere of learning process so that students can actively develop their potential to have spiritual abilities, self-control, personality, intelligence, noble morals, and the skills needed by themselves, society, nation, and state (Law No. 20 of 2003). The atmosphere of the successful learning process is one of the determinants of success in learning. The successful learning process is influenced by the accuracy in the selection of learning models applied by the teacher.

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In accordance to the regulation of the Minister Education and Culture Republic of Indonesia Number 103 of 2014, Article 2 states that the learning process should be based on student activities. The learning process is organized in order to motivate students for being active and increase creativity, independence and focus on the physical and psychological development of students in an interactive, inspiring, fun, and challenging way. To achieve these objectives, teachers are required to be able to choose appropriate and innovative learning models in presenting lessons. According to the theory of Gagne and Berliner in Hernawan's research (2009), learning activities are the condition of one's body and soul that it activates in receiving information / material, and do the transformation processing. One indicator of students learn desire includes the activities of students during the learning process.

According to Trianto (2009) statement, the learning model is one of the special designed approaches which can be taught with a gradual pattern of activities. It is step by step to support the learning process of students relating to the well structured declarative knowledge and procedural knowledge. The learning model applied by the teacher should be able to help the analysis process and increases student activity. For these reasons, the learning model with the student centered approach is considered in accordance with 2013 curriculum learning and 21st century learning. However, in regard to research through observations and interviews, students who have low ability both in terms of cognitive and skills are not achieved or imperfectly achieved the learning outcomes in the learning process with a student centered. This is because the students do not understand about the learning material. For this reason, the learning model with the teacher centered approach is sometimes considered to be more effective to be applied in learning process.

Based on the results of this study, it was revealed that the use of learning models with the Student Centered Learning (SCL) approach is appropriate if it is applied to students who have high spatial ability. But for the students who have low spatial ability, the Student Centered Learning (SCL) model is not effective. While in this case, teacher centered learning models or direct learning are more effective to be applied (Ardian et al., 2015). Kirschner et al. (2006) supported the previous statement because he has found the failure of the student centered approach in learning process. After half a century of advocacy, he obtains many weaknesses of this model, so that the student centered was ineffective even leading to negative impact.

This is in line with the opinion of Ngalimun (2016) which suggests that students can develop attitudes and critical thinking with direct learning strategies that combined with other learning strategies. In addition, based on Sari's research (2014), it was revealed that there was a 21st century learning model (blended learning) which is a learning process that combines direct learning by face to face (teacher centered) with online learning. These are very effective to be applied in the learning process.

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In addition, the experience of researchers as teachers at Pekanbaru Plus Binabangsa High School has found a problem that is always faced every year. The problem is students the ability to express opinions is very low. They even don't dare to express opinions or speak in front of the class even more in public. So often the learning process becomes very monotonous and passive. Likewise with students in this school year, most of them are difficult to express opinions. Even if the learning process uses a model with a student centered approach, more students ultimately do not understand the learning material so the learning objectives are difficult to achieve.

After examining the various learning models available, there is one learning model that is felt to be appropriate and preceded by a teacher centered approach (in the form of lectures). The learning model with a student-centered approach model that prioritizes active student activities and emphasizes the ability to express opinions is an Articulation learning model. The articulation learning model is one of the cooperative learning models, named as Cooperative learning. Cooperative learning model is part of the learning approach which is more prioritizing the activities of students (it is also known as student-centered). In Munib's research (2016) initially, the Motokinestetik Articulation method was developed by Young and Hawk (1938). Motokinestetik Articulation Method is an articulation method which the application is directly externally moved in the mouth, jaw, and neck by speech therapists. The purpose of the Motokinestetik method is to correct the wrong articulation in order to prevent learning the wrong articulation.

Most of the experts say that a good learning model is a learning model applied to the study materials, certain subjects, or sub-subjects. So that students get maximum results, with the emphasis that not all learning models can be applied to every type of learning material. In developing learning models, many learning models emphasize the activeness of students in the learning process, including the Articulation learning model. According to Eko (2011) Articulation learning model is a model in which the process of students is required to be able to act as a recipient of the message as well as acting as a messenger. The articulation learning process is like a chain message. This means that what has been given by the teacher, a student must continue and explain it to other students (pairs of groups). Articulation learning models are considered effective for increasing student activity, motivation, and learning outcomes (Rindiantika et al., 2017).

According to Huda (2013), the difference between the Articulation model and other learning models lies in the Articulation model. Every student has the same opportunity to express their group's opinion, where the importance is on the students' communication to their group mates. In the Articulation model there are interviews or listening to a group which presents the results of their discussion in front of other groups. According Istarani (2012), Articulation learning model aims to arouse the curiosity of students by increasing the confidence of students to ask questions. Articulation learning models have sequences like chain messages. It means that what has been conveyed by the teacher, a student must continue and explain it to other students (pairs of groups). This is the uniqueness of the

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Articulation learning model. Students have demands to be able to act as recipients of messages as well as acting as messengers (Ngalimun, 2012).

Although Articulation learning model is an interesting learning model that can help students to remember long-term subject matter, there are several things cause the existing Articulation learning model is less attractive among teachers to be applied in the learning process. Based on the research of Yantini et al. (2013) explained that the effectiveness of Articulation learning models is lower than other learning models. This is because the Articulation learning model considered to have many weaknesses. The Articulation learning model is considered only for certain subjects, the time required to apply this model is too long, the material obtained is small, fewer ideas emerge, and if there are disputes, there will be no mediators.

With various strengths and weaknesses of the Articulation learning model, the researcher is interested in developing this learning media. So, it is hoped that through the development of this learning media will create an interesting new learning model to be applied in various conditions. The necessity to develop this learning model is to help teachers in the learning process and provides a learning experience that is appropriate to the needs of students in their environment and more meaningful.

With various strengths and weaknesses of the Articulation learning model, the researcher is interested in developing this learning model, where the purpose of the research is to produce an Articulation learning model development that is oriented towards the activities of the students. The development of this Articulation learning model emphasizes the ability to communicate and is a learning model with a student centered approach, but begins with the lecture method (teacher centered approach).

## **2. Methodology**

### ***Types of Research***

This type of research was research and development (R&D). According to Sugiono (2008), research and development is defined as a research method used to produce certain products and test the effectiveness of these products. This research used the Pre-Experiment method with the design using only the experimental class without the control class. The Research and Development (R&D) model that used in this research was the Isman Model. The Isman model had five systematic steps; input, process, output, feedback, and learning.

### ***Development style***

This research was a development research that aimed to create or develop a new learning model for high school students Plus Binabangsa Pekanbaru. The model used in this study referred to the Isman model development research which had five

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systematic steps namely input, process, output, feedback and learning. But in this study, the researchers only reached the fourth stage, namely the feedback stage with the development of the previous designed.

### ***Development Procedure***

The Research and Development (R&D) model that used in this study was the Isman model which had five systematic steps; input, process, output, feedback, and learning (Tegeh et al., 2014). But in this study the researchers only reached the fourth stage, namely the feedback stage with the development of the previous design which can be seen in Figure 1.

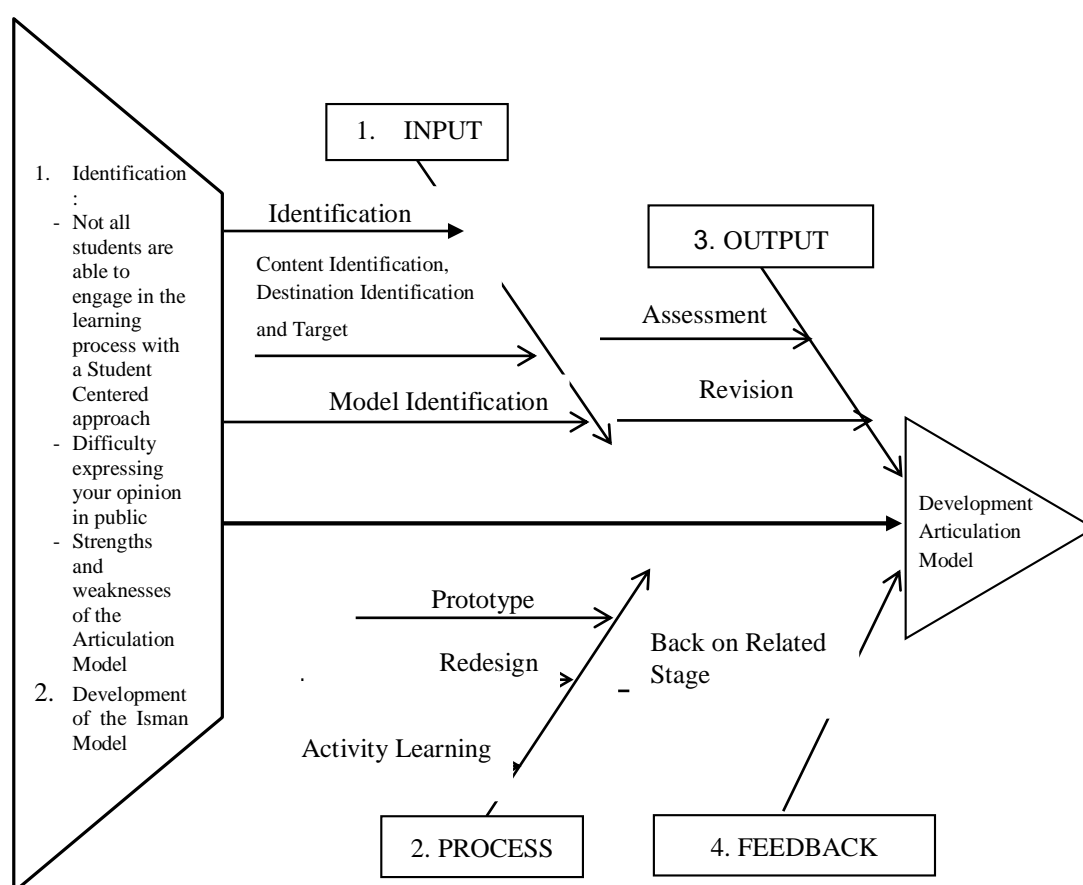


Figure 1. Articulation Development Design

### ***Data analysis technique***

Data analysis conducted in this study was qualitative data and quantitative data. In this study, qualitative data and quantitative data were obtained through questionnaires and interviews with both respondents / students and from experts. Qualitative data obtained when validating the development of learning models in the form of comments and suggestions from the validator. Comments and suggestions obtained from the validator were used as a reference to make improvements or revisions to the learning model developed. Analysis of the data used quantitative

descriptive methods with Likert scale technique to determine the effectiveness on the development of the Articulation model.

This research aimed to create or develop a new learning model for SMA Plus Binabangsa Pekanbaru students. Development defined as a research method that intentionally, systematically, aimed / was directed / directed to find, found, formulated, improved, developed, produced, tested the effectiveness of products, models, methods / strategies / ways, services, certain procedures that were superior, new, effective, productive, and meaningful (Putra et al., 2011).

### **3. Results and Discussion**

The results of the research are products that develop the Articulation learning model which is oriented towards student activities. This development research refers to the Isman development model, which consists of a number of stages: 1) the input stage; 2) the process stage; 3) the output stage; 4) the feedback stage. At the input stage consists of identifying needs, identifying contents, identifying goals and objectives, and identifying learning models. The initial stage of this research begins with identifying the needs of students and curriculum at Pekanbaru Plus Binabangsa High School. To identify the curriculum, it is known that SMA Plus Binabangsa Pekanbaru has used 2013 curriculum in accordance with applicable regulations.

This research uses observation and interview methods. Observations were made through observations, and interviews were conducted with fellow teachers at Pekanbaru Plus Binabangsa High School. The results of observations made based on observations and interviews to students in Pekanbaru Plus Binabangsa High School that have less effective ways of learning. Because of that situation, many teachers confront some obstacles in achieving learning objectives. Students are often being passive when the learning process is carried out. Although, teachers often apply the learning model with a student centered approach in the learning process in the classroom. In addition, SMA Plus Binabangsa students especially social studies classes have very low ability to express their opinions and speaking abilities. This is what often causes the achievement of learning objectives is not achieved, so the learning outcomes are not optimal.

In addition, based on observations and interviews also obtained information that students in Binabangsa Plus High School are mostly students who have quite low abilities, both in terms of cognitive and skills. This is because most of the students initially are less superior, and they are not accepted in public schools or other excellent schools. So if it is seen from the abilities and needs of students, it is necessary to have updates or creative steps from the teacher towards the implementation of the learning process in class. If it is viewed from the needs of students, it needs a learning model that is able to hone the ability to express opinions and public speaking.

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Content identification related to content is seen from the scientific aspects of learning material and indicators of competency achievement (GPA). The main purpose of content identification is to see whether or not the Articulation learning model needs to be seen from the content of the learning material needs and indicators of competency achievement based on the curriculum. Identifying the content of learning material and indicators of competency achievement are useful for determining the competencies in which the learning model will be developed. Content identification is adjusted to the Basic Competencies to be achieved in the syllabus of Economics subjects in the even semester of the 2013 curriculum. One of the basic competencies of Economics 10th grades in even semester (KD 3.7) is to describe the concept of business entities in the Indonesian economy and basic competencies (KD 4.7), namely presents the roles, functions, and activities of business entities in the Indonesian economy.

The identification of goals and objectives is based on an assessment of identification of needs and identification of content. The identification of goals and objectives in this study refers to the achievement of competency achievement indicators (GPA), where the objectives of the learning process must refer to ways or steps so that indicators of competency achievement can be achieved properly. Identification of these goals and objectives needs to be done to find out the right learning model to be implemented on business entity material so as to be able to achieve the learning objectives well and in accordance with the needs of students at SMA Plus Binabangsa Pekanbaru.

After identifying the needs, contents, and objectives, it has been obtained the description that in Pekanbaru Plus Binabangsa High School needs a learning model that has steps with a combination of student centered approach models and begins with the lecture method of the teacher in explaining learning material (teacher centered). And it also has the characteristics of being able develop verbal skills or the ability to deliver opinions about learning material. Articulation learning model is considered by researchers to be an appropriate learning model. This learning model has steps that are considered capable of developing cognitive, verbal, motor and attitude skills in students.

At the process stage, the development of the Articulation model development is based on identification at the input stage. In addition, development is needed for the Articulation model due to various weaknesses from the previous Articulation model. The process phase consists of three steps: 1) prototype step; 2) redesign (redesign); and 3) learning activities. The prototype is the initial form of the development of the Articulation model that was made for further development to be tested later. The prototype is made referring to the previous Articulation model which was then adapted to the needs of the students, the curriculum as well as the suitability of the goals and learning objectives at SMA Plus Binabangsa Pekanbaru. The prototype is also structured based on the weaknesses of the previous Articulation model with the aim that this model can be more useful than before and in accordance with the needs of students.

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After the prototype is made and before being tested, it is necessary to test the prototype to the experts. Expert validation is intended to identify and correct errors that exist in the learning model developed (prototype). The redesign is done on a prototype based on the basic concepts of Articulation with the steps of the Articulation learning model. Through this Articulation learning model development design, it will be more interesting so that learning objectives can be achieved properly. Based on the comments and suggestions of the validator, the teacher then begins to learn the steps and apply the development of the redesigned Articulation model in learning Economics. Learning activities carried out to assess the effectiveness of the Articulation model that has been designed. The steps of the developed Articulation learning model can be seen in Figure 2.

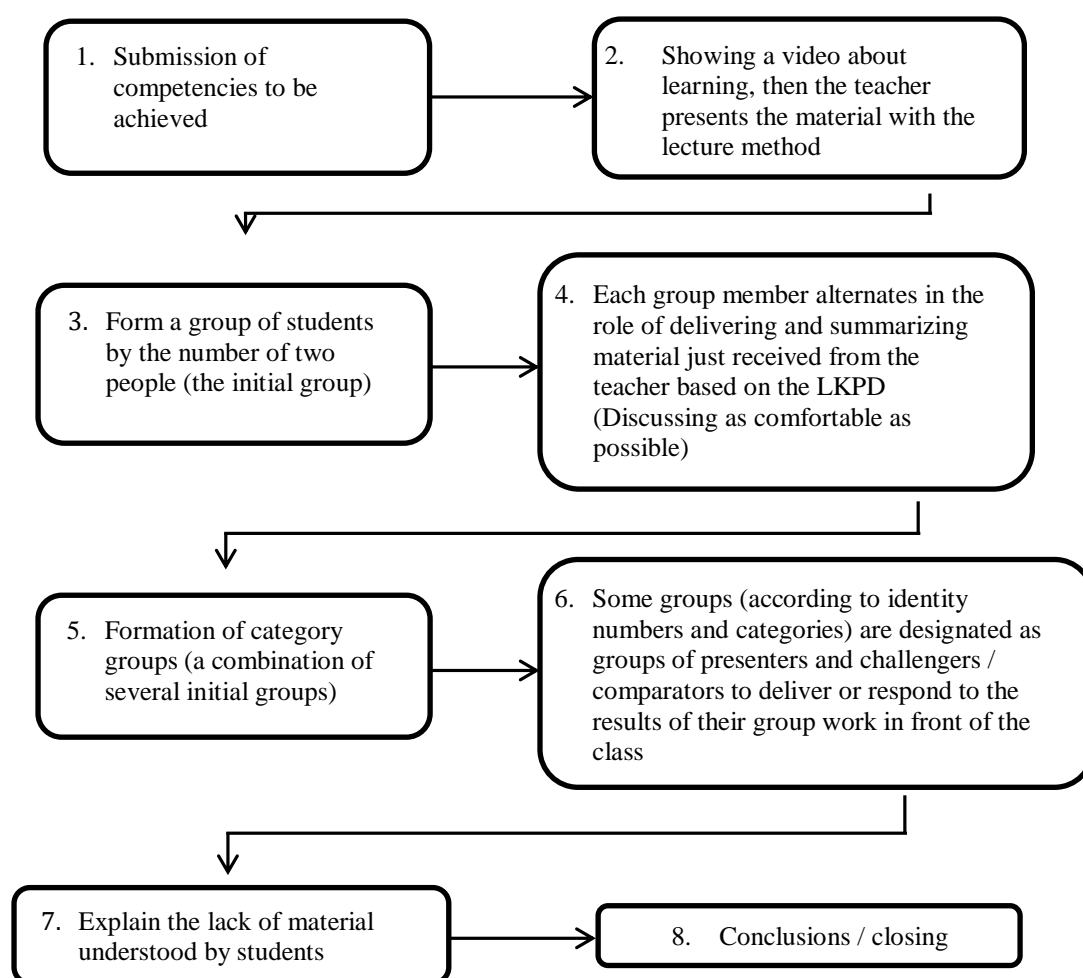


Figure 2 Steps of Developing the Articulation Model

After the process phase is finished, the next stage is the output stage which consists of two steps: 1) assessment and 2) revision. This process is to see and determine whether students demonstrate the skills, knowledge, and attitudes described by the teacher in the learning objectives or not. In addition, assessment is also seen through students' responses to the use of the Articulation model that



has been developed. In this study the authors used a questionnaire distributed to 24 students of class X IPS 1. There are 13 items covering 4 aspects including aspects of material clarity; connectedness; reasoning and activeness; and technology. Questionnaires given to students get results that can be seen in Figure 3.

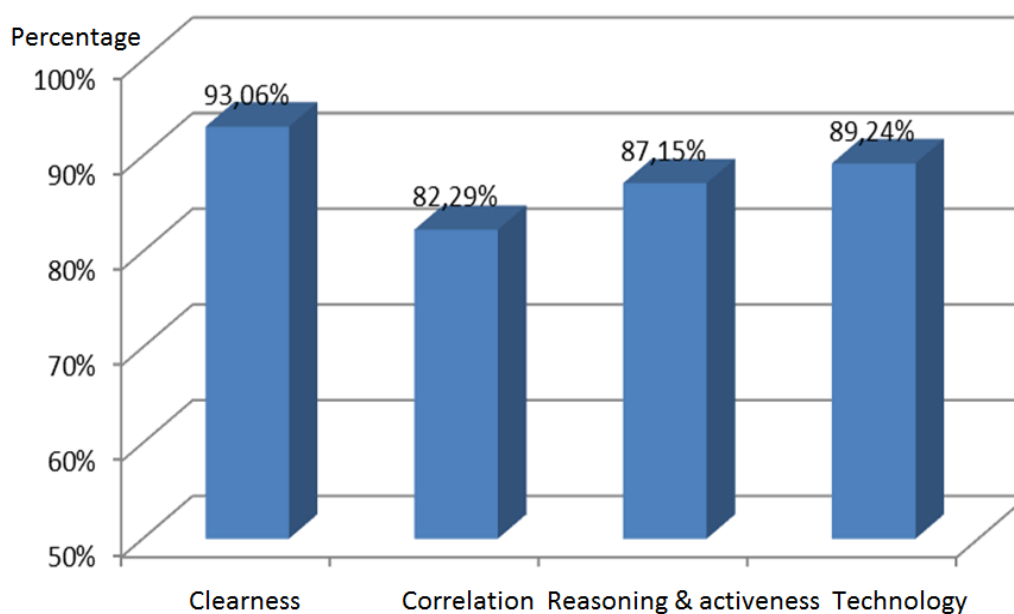


Figure 3. Learners Response

Based on Figure 3, it can be explained that the responses of the Binabangsa Pekanbaru Plus X SMA 1 IPS students to the use of the developed Articulation model are the highest percentage with result 93.06% on the indicator of material clarity. While the lowest percentage is 82.29% on the connectedness indicator. The questionnaire consisting of 13 questions covering 4 aspects given to 24 students of class X IPS 1 obtained an average percentage of 88.62% expressed in the highly effective category.

The revision step is carried out after the researcher has studied and assessed. Based on the assessment stage, both in terms of the process and students' responses to the use of the Articulation model that has been developed, it is concluded that the Articulation development model which is oriented towards active student activities has been very effective, only that needs to be revised is the connectedness indicator. Actually, the connectedness indicator has been very effective, but because it has the smallest score. The connectedness indicator is slightly revised by adding examples in the form of images to the learning material through learning videos, where the examples given have connectedness in the daily lives of students.

Feedback is carried out if the revision stage is mostly done and if in the learning activity stage is found that many students do not follow the planned learning

procedures. However, because in this study, when the learning activities took place as planned and obtained a very effective response, the researcher felt that there was no need to carry out this feedback stage. The development of the Articulation model is sufficient to reach the revision stage.

#### 4. Conclusion

This research is a research development (development research) that aims to create or develop a new product in the form of an articulation learning model oriented towards student activity for students of SMA Plus Binabangsa Pekanbaru. The model used in this study refers to the Isman model development research which has five systematic steps namely input, process, output, feedback and learning. Based on the results of the validation test to the validators it can be concluded that the development of an Articulation learning model oriented towards student activity is appropriate for the learning process. Furthermore, based on the students' response after the research, the students state that the learning-oriented Articulation learning model of learners that have been developed is very effective for use in the learning process for Economics subjects.

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