

# Development of E-Learning Based On “SMILE” Learning Model to Improve Economic Learning Outcomes of Class X Students of Senior High School 1 Pahae Jae 2019/2020

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**Abstract.** This study aims to: (1) Produce learning models that are feasible to use, easy to learn and can be used for learning (2) to determine the effectiveness of learning models based on E-learning. This research is a type of development that uses the product development model Borg and Gall and combined with the model's learning design Dick and Carey. The method used in this study is a quasi-experimental method. The results of the hypothesis test study prove that there are significant differences between economic learning outcomes that are learned using the *E-learning* "SMILE" learning model with economic learning outcomes that are learned using inquiry learning models.

Keyword: e-learning based "smile" learning model, inquiry learning model, economic learning outcomes

## 1. Introduction

The use of internet in learning has become one of the new innovations in the use of learning resources and learning media. Very many applications and facilities available on the internet can be utilized to improve the quality and quality of learning. Researchers want to develop learning models based on E-learning in economic subjects to improve student learning outcomes.

Clark and Mayer [1] said that "E-learning is a command that is delivered into a computer or mobile device to achieve the objectives of the learning process<sup>1</sup>. Russel [2] also explains that E-learning is online learning that comes from teaching results delivered through electronics using computer-based media<sup>2</sup>. The learning model that will be developed in this research is the "SMILE" learning model based on E-learning. Learning using the E-learning based learning model is a learning process that is carried out electronically using computer-based media by utilizing the internet and using the Google Classroom application as a means of delivering teaching materials and means of interaction carried out to achieve learning goals.

Can be seen in the content of the meaning of the "SMILE" learning model, namely (S) elf Efficacy is the belief that each individual has the ability to control thoughts, feelings, and

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behavior (M) motivation, namely in the learning process, motivation as a mobilizer that guarantees the learning process and give direction or direction in learning so that what goals can be achieved, (I) identification, namely identifying the objectives of the learning plan. The process of designing learning starts from how to identify a problem. The activity of preparing a learning plan is one of the tasks of a teacher in the learning process. In order for the learning process to run well, the teacher must be required to compile and formulate learning goals. (L)earnings by doing, that is Learning by doing is direct learning that is done by students actively both individually and in groups. This learning directly practices what is on the subject matter both individually and in groups. Active learning or learning by doing, namely students must be involved in the learning process spontaneously and from the curiosity of students about new things encourage students to be actively involved in the learning process. Active learning can foster students' learning abilities and explore the potential of students and teachers and the last (E) valuation is the process of giving an assessment to students, where assessment is seen when the teacher gives an initial quiz and a final quiz. The teacher makes the decision to what extent the teaching objectives have been achieved by students.

## **2. Research Method**

This study uses a research and development approach (Research and Development), better known as R&D studies, which in the process includes the development and validation of educational products, as expressed by Borg & Gall. Borg and Gall [3] said that Education Research and Development (R&D) is a process used to develop and validate educational products. In this study the steps taken in the study only reached the fifth step of the ten steps, namely: (1) Introduction, (2) Creating learning designs, (3) Collection of materials, (5) making and implementing learning models, (5) Review or field test in the context of formative evaluation and product revision<sup>3</sup>. Formative evaluation continues as long as the development process starts from the analysis, design, production and implementation stages until the results are obtained in accordance with the stated objectives, and finally the product effectiveness test.

As stated, if in making a learning model "SMILE" that has been made it cannot be directly tested first, but it must be the product design first, and the product design is tested. Product designs must be validated and then revised, and then the next product is made in the form of a prototype. This prototype is then tested. The initial stage of the trial is carried out by simulating the use of the "SMILE" learning model. After being simulated, it can be tested on a limited group. Testing is done to find out information whether the learning model is more effective and efficient than the inquiry learning model. For this reason, testing can be done experimentally, which is to compare the effectiveness of the E-learning based "SMILE" learning model with the inquiry learning model. An indicator of the effectiveness of the "SMILE" based e-learning learning model is the increase in student economic learning outcomes. The research subject or respondent is the party that is used as a sample in a study, research subjects discuss about the characteristics of the subjects used in research, and subjects in research for the development of learning models in this research development are adjusted to the trials conducted on individual trials a sample of 3 students, a small group sample of 6 students and a main trial of 36 students

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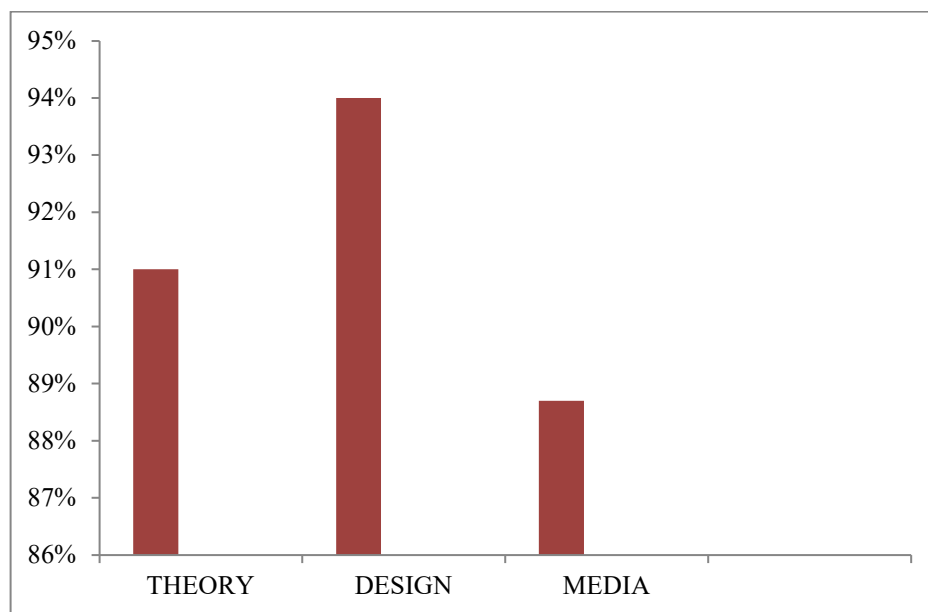
### 3. Result and Discussion

#### 1. Feasibility research test

The results of the study conducted by material, design and media experts in every aspect of the overall assessment are determined by the average score in their respective categories. The results of the study are then analysed to determine whether or not the learning model is developed. The average percentage of the results of research material experts, learning design experts and media experts will be described as follows:

**Table 1.** The results of the feasibility of products that have been validated by experts

No	Indicator	Average Percentage	Criteria
1	Theory	91%	Very Good
2	Design	94%	Very Good
3	Media	88,7%	Very Good
	<b>Average</b>	<b>91,23%</b>	<b>Very Good</b>



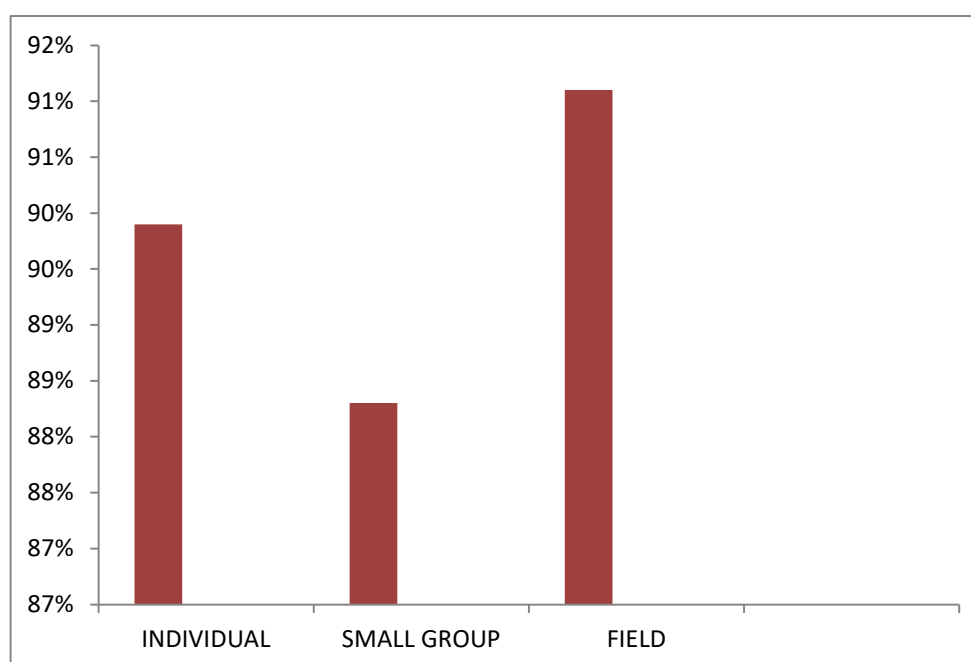
Based on the above table, it can be concluded that the "SMILE" Learning Model based on E-learning in economic subjects is proven to be feasible because it has passed material experts, design experts, media experts, individual trials, small group trials and field trials and the results are stated "Very good".

## 2. Effectiveness research test

The results of studies that conducted by individual, small group and field tests determined by the average score in each category. The average percentage will be explained as follows:

**Table 2.** The results of the effectiveness of the products that have been tested by individuals, small groups and the field

No	Indicator	Average Percentage	Criteria
1	Individual	89,9%	Very Good
2	Small Group	88,3%	Very Good
3	Field	91,1%	Very Good
	<b>Average</b>	<b>89,7%</b>	<b>Very Good</b>



According to Hanum [4] that e-learning learning can be used as a tool in learning in schools and can be used to improve the understanding of the material and expand the source of teaching materials and increase learning activities and assist teachers in streamlining learning time in the classroom<sup>4</sup>. Hakim [4] said that through the Google Classroom application it was assumed that learning objectives would be more easily realized and full of meaningfulness<sup>5</sup>. Therefore, the use of Google Classroom makes and makes it easier for teachers to manage learning and convey information precisely and accurately to students. From the results of the research data processing conducted there are differences in student learning outcomes using E-learning "SMILE" learning models in economic subjects with students using inquiry learning models namely the average economic value taught using the E-based "SMILE" learning model -learning in

economic subjects is higher than that using the inquiry learning model of the test results using the t test, obtained  $t_{\text{count}} = 3.08$  while  $t_{\text{table}} = 1.99$ . Because  $t_{\text{count}} = 3.08 > 1.99$ , it can be concluded that the learning outcomes of students who use the E-learning "SMILE" learning model are higher than student learning outcomes using inquiry learning models.

This can be seen from the average economic value taught using the E-learning based "SMILE" learning model, which is 18.22% higher than those using the inquiry learning model viz. This data proves that the "SMILE" learning model based on E-learning can improve student economic learning outcome

#### 4. Conclusion

Based on the formulation, the purpose of the discussion, the results and research discussion of the development of the learning model "SMILE" based on E-learning in economic subjects that have been tested in class X students of SMA N 1 Pahae Jae, it can be concluded as follows: (1) The "SMILE" learning model based on E-learning is stated in terms of both products and is suitable for use in the tenth grade students of SMA Negeri 1 Pahae Jae for economic learning, (2) The use of the "SMILE" learning model is more effective in improving student economic learning outcomes compared to using inquiry learning models.

#### 5. References

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