

## DIFFERENTIAL LEARNING MODEL BASED ON EXPERIENTIAL LEARNING THROUGH MODEL AND GROUP TO IMPROVE TEACHER SKILLS IN PREPARING DIFFERENTIATION LEARNING PLANS

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### Abstract

The purpose of this research is to describe: What is the response of the teacher/supervisor to the application of the group-based Experiential Learning learning model and the model in teacher training in the preparation of differentiation learning and How did the participants respond to the application of the group-based Experiential Learning learning model and the model in teacher training in the preparation of differentiation learning. Research activities to be carried out are research and development methods (Research and development) or R&D. The general steps of the R&D. The result of the research are: (1.) From the teacher's response questionnaire to the learning activities of the differentiation learning model based on experiential learning through role models and groups, a good response was obtained from the teacher. So in this case learning is said to be successful with a good teacher's response.

(2). The results of the effectiveness data above are from the tabulation of the teacher's response questionnaire, and the participant's response questionnaire to learning using a differentiation learning model based on experiential learning through the role of models and groups. with good average learning outcomes, good lecturer response questionnaires, and very good student response questionnaires, the effectiveness criteria are very effective

Keywords: Model, Experiential Learning, Differentiation Learning Plan

### INTRODUCTION

This research is motivated by the problem that there are still teachers who do not understand how to develop differentiation learning plans. This is reasonable because differentiation learning is a new thing that is one of the demands in the independent curriculum. This raises the anxiety of researchers so that researchers try to try to explore the problems that occur regarding the teacher's lack of understanding in preparing differentiation learning plans. The results of monitoring and evaluation carried out on this matter included many obstacles faced by teachers, especially in mastering and applying in mapping student abilities and compiling differentiation lesson plans. In general, teachers are also still confused about the concept of differentiation learning as outlined in the lesson plan and its implementation. In this effort, researchers will provide a kind of learning that can provide an effective way to provide teachers with a complete understanding in preparing differentiation learning plans.

One learning model that emphasizes direct experience is experiential learning. Experiential learning orients learning to direct experience. Evidence of the successful use of experiential learning through modeling and group roles as a learning approach that can improve teaching skills was put forward by (Kolb, 1984) who stated that modeling is the part where the lecturer becomes a model in direct learning and students

can observe it. which in turn will adopt the lecturer's teaching style. According to (Kolb et al., 2014), modeling in learning is the first phase in an effort to improve the skills of prospective teachers in addition to the discussion phase, the enrichment phase, and the peer learning phase. This shows that the modeling phase has a very important role in providing direction for students in managing learning.

The role of cooperative groups in learning is required to take turns carrying out the division of tasks for one skill component. This is done so that all students can have direct experience related to these roles, thereby supporting the improvement of their teaching skills in general and specifically in differential learning. This differentiation learning is important as one of the emphases in the independent curriculum implementation(Megahed, 2010).

According to (Kolb et al., 2014), Differentiated Learning is an attempt to adjust the learning process in the classroom to meet the individual learning needs of each student. However, differentiated learning does not mean that the teacher has to teach 32 different ways to teach 32 students. Nor does it mean that teachers have to increase the number of questions for students who work faster than others. Differentiated learning also does not mean that teachers have to classify those who are smart with those who are smart and those who are less with those who are less. Nor is it a different task for each child. Differentiated learning is not a chaotic learning process, in which the teacher then has to make several lesson plans at once, where the teacher has to run around to help person A, person B or person C at the same time. No. The teacher is certainly not an angel with wings or a Superman who can go around to be in different places at once and solve everything

problem. However, in the field the teachers still do not have a correct understanding of this differentiation learning. Therefore it becomes important how teachers can get a good understanding of differentiation learning through group-based experiential learning teaching models and models(Harris, 2019).

The purpose of this research is to describe:

1. What is the response of the teacher/supervisor to the application of the group-based Experiential Learning learning model and the model in teacher training in the preparation of differentiation learning.
2. How did the participants respond to the application of the group-based Experiential Learning learning model and the model in teacher training in the preparation of differentiation learning(Megahed, 2010).

The term "model" is defined as a framework/concept that is used as a guide in carrying out an activity. The model can be interpreted as an imitation of the real object, such as "globe" is a model of the earth. The term model is used to indicate the first meaning as a framework/concept. On this basis, what is meant by a teaching and learning model is a systematic framework/concept and procedure for organizing learning experiences. The function of the teaching and learning model is as a guide for teaching designers and teachers in planning and implementing teaching and learning activities.(Takino, 2019) as quoted by (Majid, 2013) defines the learning model as "a plan or pattern that we can use to design face to face teaching in the classroom or tutorial setting and to shape instructional material" (a plan or pattern which we can use to design face-to-face in-class or additional learning outside the classroom and to sharpen teaching materials). From the above understanding it can be understood that: first: the learning model is a basic framework for learning that can be filled with a variety of subject matter according to the characteristics of the basic framework.

Second: learning models can appear in various forms and variations according to the philosophical and pedagogical foundations that lie behind them (Harris, 2019).

Experiential learning theory (ELT), which later became the basis of the Experiential learning model, was developed by David Kolb around the beginning of 1980s. This model emphasizes a holistic learning model in the learning process. In Experiential learning, experience has a central role in the learning process. This emphasis is what distinguishes ELT from other learning theories. The term "experiential" is here to distinguish between cognitive learning which tends to emphasize cognition more than affective. (Benny, 2009) stated that experience-based learning (Experiential Learning) builds knowledge, skills and attitudes through experiences that are beneficial to learners. According to (Tamur, 2012), experience-based learning (Experiential Learning) is "an inductive process, learner-centered and activity-oriented to reflect personally on an experience and formulate a plan to apply what has been gained from experience". Experience-based learning occurs when learners do: (1). Participate in activities (activities), (2) critically investigate experiences in activities, (3). Taking advantage of the experience gained, (4). Apply the experience gained to new situations.

Based on (Astuti, 2016), the Experiential Learning learning model is able to improve students' critical thinking skills. While student learning activities are mostly categorized as active. Thus, that experience-based learning can foster student activity to be active in learning.

Differentiated Learning, remember one by one the students in your class. What are the characteristics of each child in your class? Do you know what their powers are? What is their learning style? What are their interests? Who has the best numeracy skills in your class? Who is the other way around? Who likes group activities the most? Who always avoids working in groups? Who has the highest reading level? Which students still need help to improve their reading comprehension skills? Who likes to write the most? Who prefers to talk? Every day, without realizing it, teachers are faced with diversity in many forms. They continuously face various challenges and often have to do and decide many things at one time. Many of these skills are not realized by teachers, because it is so natural that this happens in class and how accustomed teachers are to facing this challenge. They make various efforts, of course the goal is to ensure that every student in their class is successful in their learning process. According to (Tomlinson, 2001), Differentiated Learning is an attempt to adjust the learning process in the classroom to meet the individual learning needs of each student.

So what exactly is differentiated learning like?

Differentiated learning is a series of common sense decisions made by teachers who are oriented to student needs. The decisions made are related to:

1. A curriculum that has clearly defined learning objectives. So it's not only the teacher who needs to be clear about the learning objectives, but also the students.
2. How the teacher responds or responds to the learning needs of his students. How he or she will adapt the lesson plan to meet the student's learning needs. For example, does he need to use different sources, different means, and different assignments and assessments.
3. How they create a learning environment that "invites" students to study and work hard to achieve high learning goals. Then also make sure every student in the class knows that there will always be support for them throughout the process.

4. Effective classroom management. How teachers create procedures, routines, methods that allow for flexibility. But also a clear structure, so that even though it is possible to carry out different activities, the class can still run effectively.

5. Continuous assessment. How does the teacher use the information obtained from the formative assessment process that has been carried out, to be able to determine which students are still lagging behind, or vice versa, which students have already achieved the set learning goals.

## RESEARCH METHODOLOGY

### 3. 1. Types and Research Design

This research includes the type of development research. The research design used is the development design according to ("Master of Science Programme: Educational and Training System Design," 1994) as shown in Figure 3.1.

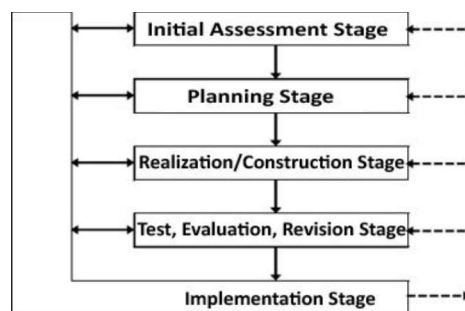


Figure 3.1. Plomp Model Development Research Design

Research activities to be carried out are research and development methods (Research and development) or R&D. The general steps of the R&D method are schematized in Figure 3.1.

### 3.2. Research subject

This research was conducted on teachers at SMA Negeri 1 Plumpang Tuban where the researcher was the supervisor of the guidance at the school. The research subjects were 27 teachers (Hulaikah et al., 2020)

### 3.3. Research Implementation.

There are three components that will be developed in this development research, namely: (a) differentiation lesson plan which is part of the independent curriculum, (b) learning tools to support the differential learning model based on experiential learning, and (c) instruments that will be used to assess the quality of the model. learning experiential learning in the preparation of differentiation/learning plans (Megahed, 2010).

differentiate.

#### a. Model Development

The stages of developing the experiential learning-based learning model refer to the development stages of the Plomp model (1997: 6-15) which only have 4 stages, namely: (a) the initial assessment stage, (b) the design stage, and (c) the realization (construction) stage, and (d) the testing, evaluation, and revision stages (Benny, 2009).

Details of the activities carried out at each stage can be explained as follows.

#### 1) Initial Assessment Stage

The activities carried out at this stage are: (1) studying learning models theoretically, especially with regard to: (a) model rationality, (b) theories that support the model, and (c) model components: syntax, social systems, reaction principles, support systems, and instructional and accompaniment impacts, (2) differentiation learning theories,

General description of research is important to show the basis of the research. It is like a very brief introduction to the methodology section.

#### 2) Design Stage

The main activities at this stage are: (a) designing the outlines of the components of the experiential learning-based learning model. Which includes: (a) syntax, (b) compiling outlines of supporting theory of the model, (c) drafting instructions for implementing experiential learning-based learning models, (d) designing the types of learning videos to be made.

#### 3) Realization/Construction Stage

At this stage, a differentiation learning model based on experiential learning was developed through the role of models and groups to improve the teacher's ability to develop differentiation modules/RPPs.

#### b. Device Development

The development of learning tools based on experiential learning models refers to the development stages of the "Plomp model" as follows:

##### 1) Initial Assessment Stage

At this stage a study was carried out on: (1) the format of the learning tools to be developed, namely: (1) Learning Plans (RP), (2) the syntax of experiential learning-based learning models as a reference for developing modules (3) Experiential-based Differentiation theories learning.

##### 2) Design Stage

The details of the main activities at this stage are designing: (1) modules, (2) lesson plans (RP) as guidelines for teaching material and training/practice in preparing differentiation lesson plans, and (3) assessment sheets. (4) learning videos

##### a) Realization/Construction Stage

At this stage learning tools were prepared which included: (1) lesson plans (RP), and response sheets.

##### 3). Instrument Development

The instruments developed were as follows: 1) teacher response questionnaire, 2) participant response questionnaire.

#### 3.4. Research Implementation

In the year of implementation of the research can be described according to the following procedure: the activities carried out at this stage were to try out the existing differentiation lesson plans. The activities carried out in this trial were (a) asking for student responses and (b) asking for teacher responses. The research was carried out from July to September.

#### 3.5. Data analysis technique

##### a. Data Analysis of Participant/Teacher Responses to Model Application

Data on participants' responses to the application of the Differentiation-based learning model based on experiential learning is divided into three aspects, namely student responses to learning.

The activities carried out to analyze participant / teacher response data in this aspect are relatively the same, namely through the following steps.

(a) Calculate the frequency and percentage of participants who gave positive responses according to the aspects asked.

(b) Determine categories for positive responses from participants by matching the percentage results with the following categories:

$3.5 < \bar{X} \leq 4$ : Very positive response;  $0.5 < \bar{X} < 1.5$ : Less positive response

$2.5 < \bar{X} < 3.5$ : positive response;  $\bar{X} < 0.5$ : The response is not positive

$1.5 < \bar{X} < 2.5$ : positive response;

The criteria set to state that the participants have a positive response to learning is that more than 50% of them give a positive response to at least 70% of the number of aspects asked

Instructor Response Analysis and learning management.

Analysis was carried out on the results of the assessment of two observers who observed the ability of lecturers to manage learning based on experiential learning models. From the results of the assessment of the two observers, the average value of KP was determined. This KP value is then confirmed by the interval for determining the category of the teacher's ability to manage learning, namely:

$KP < 1.5$ : means very low;  $3.5 \leq KP < 4.5$ : means high

$1.5 \leq KP < 2.5$ : means low;  $4.5 \leq KP$ : means very high.

$2.5 \leq KP < 3.5$ : means enough/moderate

The criteria used to decide that the teacher's ability to manage learning is adequate is that the minimum KP score is in the high category. If the KP value is in another category, then the teacher must increase his ability to meet the minimum KP value in the high category.

## RESULTS

### A. Teacher Response Questionnaire and Learning Management.

Teacher/teacher response questionnaires are used to obtain an assessment from the instructor on the learning activities of the Differentiation based experiential learning model through the role of models and groups. The teacher's response questionnaire is given after the implementation stage. This teacher response questionnaire contains several aspects regarding the components of learning tools in assisting learning activities which can be seen in Table 4.1., the components of learning tools which can be seen in Table 4.2., and the feasibility of learning devices and other assessments which can be seen in Table 4.3

Table 4.1. Questionnaire of Teacher Responses to Components of Learning Devices in Assisting Learning Activities

Remarks Learning Devices	Very Helpful	Helpful	Enough	Lack	Not Helpful
Syllabus	√				
SAP	√				
Modules	√				
Learning Scenario	√				

Textbooks	√
Learning Media	√
Learning Activities	√

Table 4.2. Questionnaire of Teacher Responses to Components of Learning Devices

Description Learning Tools	Very good	Good	Ordinary	Poor	Not good
Syllabi	V				
SAP	V				
Module	V				
Learning Scenario	V				
Teks Book	V				
Learning Media	V				
Learning Activities	V				

Table 4.3. Teacher Response Questionnaire on Experiential Learning-Based Microteaching learning through Model and Group Roles

Questionnaire	Answer
1. Is this learning tool necessary and appropriate to be developed in other competencies?	Very necessary, because this learning tool is proven to be able to increase: 1) teacher/participant activity in learning activities, 2) positive responses of students and learners.
2. If it is necessary and feasible to develop, what activities need to be carried out?	a. Training: it is necessary to conduct training on learning models for partner teachers and partner lecturers b. Device Development: learning device development workshop c. Others: workshop on making learning videos.

Questionnaire	Answer
3. Can the differentiation learning strategy based on Experiential Learning through Model and Group Roles be used as the main strategy in learning activities for other subjects?	Differentiation-based learning strategies based on Experiential Learning through the Role of Models and Groups can be used as the main strategy in social studies learning activities
4. What obstacles might be encountered in carrying out learning activities using these learning tools and models?	It takes quite a lot of time for monitoring and evaluation of participant/teacher observation activities in various places/schools
5. In your opinion, what are the advantages obtained in implementing this learning model?	5. In your opinion, what are the advantages obtained in implementing this learning model?

#### B. Participant Response Questionnaire.

The teacher's response questionnaire is used to obtain an assessment from the teacher as a participant in the learning activities of the differentiation learning model based on experiential learning through the role of models and groups. Participant response questionnaires were given after the implementation stage (Takino, 2019). The participant response questionnaire contains several aspects regarding learning activities. This aspect consists of four aspects and each aspect has different answer choices. The first aspect with the answer choices "happy/dissatisfied", the second aspect with the answer choices "new/not new", the third aspect with the answer choices "interested/no", and the fourth aspect with the answer choices "yes/no". Response questionnaire data for students can be seen in here (the data) : Total score = 1.796, total= 112 and the average = 3,9. Where is the teacher's (participant) response questionnaire has been processed by changing the answer choices "happy, new, interested, and yes" to a score of 4, and the answer choices "not happy, not new, not interested, and not" to a score of 0, to make it easier to find the average and the percentage. The average response per participant is obtained by the formula:

$$\bar{x} = (\sum \text{score})/n$$

Where,

$\bar{x}$  = average participant response questionnaire

$\sum \text{score}$  = total score obtained

n = number of aspects

The overall average of the participant response tabulations was 3.9 which was obtained by the formula:

$$\bar{x}_{\text{tot}} = (\sum [\bar{x} \text{ score}]) / n_{\text{students}}$$



$$\bar{x}_{tot} = 62/27$$

$$\bar{x}_{tot} = 3,9$$

The value of 62 in the calculation above is obtained from the sum of the average scores of participant response questionnaires obtained from student response questionnaire sheets to learning activities, while the value of 27 is obtained from the number of participants who filled out the response questionnaire.

The percentage of student responses is obtained by the formula:

$$p = (\sum x) / (\sum x_i) \times 100\%$$

$$p = 3.9/4 \times 100$$

$$p = 97\%$$

On this basis, it can be concluded from the student response questionnaire assessment, with an overall average of 3.9 and a percentage of 97% according to the qualification indicators, the learning activities are said to be very good and descriptions of each aspect can be seen in Table 4.5.

ASPECT			
I	II	III	IV
How do you feel about: (Happy/Unhappy)	How do you think about: (New/Not New)	Are you interested in participating in further learning activities like the ones you have participated in?(yes/Not)	Your opinion about the Textbook (Yes/No)
1. Study Materials 2. Textbook 3. Observation and Assessment Sheet 4. Learning atmosphere in the classroom 5. Learning models/strategies/methods applied 6. Learning media 7. Subject matter	1. Study Materials 2. Textbook 3. Observation and Assessment Sheet 4. Learning atmosphere in the classroom 5. Learning models/strategies/methods applied 6. Learning media 7. Subject matter		A. Can you understand the language used in the Textbook B Can you understand the language used in the Observation/Assessment Sheet . C..Are you interested in the appearance (writing, illustrations, pictures, and the location of the pictures) in the Textbook?

From the teacher's response questionnaire to the learning activities of the differentiation learning model based on experiential learning through the role of models and groups, good responses were obtained from the teacher. So in this case learning is said to be successful with a good teacher's response.

So it can be concluded the results of the effectiveness data above from the tabulation of the teacher's response questionnaire, and the participant's response questionnaire to learning using a differentiation learning model based on experiential learning through the role of models and groups. with a good average learning outcome, the lecturer response questionnaire is good, and the student response questionnaire is very good, the effectiveness criteria are very effective

## DISCUSSION

From the teacher's response questionnaire to the learning activities of the differentiation learning model based on experiential learning through the role of models and groups, good responses were obtained from the teacher. So in this case learning is said to be successful with a good teacher's response. So it can be concluded the results of the effectiveness data above from the tabulation of the teacher's response questionnaire, and the participant's response questionnaire to learning using a differentiation learning

model based on experiential learning through the role of models and groups. with a good average learning outcome, the lecturer response questionnaire is good, and the student response questionnaire is very good, the effectiveness criteria are very effective

### CONCLUSION

1. From the teacher's response questionnaire to the learning activities of the differentiation learning model based on experiential learning through role models and groups, a good response was obtained from the teacher. So, in this case learning is said to be successful with a good teacher's response.
2. The results of the effectiveness data above are from the tabulation of the teacher's response questionnaire, and the participant's response questionnaire to learning using a differentiation learning model based on experiential learning through the role of models and groups. with good average learning outcomes, good lecturer response questionnaires, and very good student response questionnaires, the effectiveness criteria are very effective

### REFERENCES

- Astuti, Y. K. (2016). Pembelajaran Berbasis Pengalaman (Experiential Learning) untuk Meningkatkan Keterampilan Berfikir Kritis dan Aktivitas Mahasiswa. *Jurnal STKIP NU Indramayu, Vol.VII No.*
- Benny, A. P. (2009). Model Desain Sistem Pembelajaran. *Jakarta: PT Dian Rakyat.*
- Harris, A. (2019). Models of teaching. In *Teaching and Learning in the Effective School*. <https://doi.org/10.4324/9780429398117-5>
- Hulaikah, M., Degeng, I. N. S., Sulton, & Murwani, F. D. (2020). The effect of experiential learning and adversity quotient on problem solving ability. *International Journal of Instruction, 13*(1). <https://doi.org/10.29333/iji.2020.13156a>
- Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development, David A. Kolb, Prentice-Hall International, Hemel Hempstead, Herts., 1984. No. of pages: xiii + 256. *Journal of Organizational Behavior, 8*(4).
- Kolb, D. A., Boyatzis, R. E., & Mainemelis, C. (2014). Experiential learning theory: Previous research and new directions. In *Perspectives on Thinking, Learning, and Cognitive Styles*. <https://doi.org/10.4324/9781410605986-9>
- Majid, A. (2013). Strategi Pembelajaran. *Bandung: PT Remaja Rosdyakarya.*
- Master of science programme: Educational and training system design. (1994). *Computers & Education, 22*(3). [https://doi.org/10.1016/0360-1315\(94\)90012-4](https://doi.org/10.1016/0360-1315(94)90012-4)
- Megahed, N. (2010). Book Review: Teachers as Learners: Critical Discourse on Challenges and Opportunities. *Excellence in Higher Education, 1*(1&2). <https://doi.org/10.5195/ehe.2010.21>
- Takino, M. (2019). Becoming BELF users: The learning process of business users of English and its conceptualization. *Journal of English as a Lingua Franca, 8*(2). <https://doi.org/10.1515/jelf-2019-2020>
- Tamur. (2012). *Tipe Pembelajaran Kooperatif. c.*
- Tomlinson. (2001). *How to Differentiate Instruction in Mixed-Ability Classroom* (S. Edition (Ed.)).