

The Validity of the PONTA Learning Model Base on Blended Learning in Vocational High Schools

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ABSTRACT

This study aims to determine the validity of the PONTA learning model based on Blended Learning in Vocational High Schools developed. The syntax of the PONTA learning model consists of: (1) Preparation; (2) Observations; (3) Negotiation; (4) Transfers; (5) Apply. The type of research is research and development. This research was conducted at Vocational High Schools (SMK) 2 and Vocational High Schools (SMK) 3 Makassar City. The data analysis technique used is descriptive analysis, by analyzing the scores on the validation sheet related to the characteristics of the Blended Learning-based PONTA learning model in Vocational High Schools that have been developed. The results showed that the PONTA learning model based on Blended Learning that had been developed met the valid criteria for use.

Keywords: *Validity, PONTA Learning Model, Blended Learning*

1. INTRODUCTION

Revolution Industry 4.0 provides challenges and opportunities in all fields that require people to change how they do their activities. These challenges and opportunities arise in line with developments in science and technology, especially in information technology. Digitalization appears everywhere, from the digital economy and bureaucracy to the education space that also requires digitalization. Even globally, humans can be said to live in uncertainty if they cannot respond to these changes [1].

Vocational education is a balanced combination of theory and practices with an orientation to working readiness graduates. The curriculum in vocational education is concentrated on the skill learning system (apprenticeship of learning) in specific trades. Following the characteristics of vocational education, it is necessary to select and implement models of innovative learning for vocational education [2]. Learning is an activity carried out by students or teachers by utilizing available facilities and infrastructure to achieve a goal. The purpose of learning is to change students' learning outcomes or competencies after attending Learning Activities [3]. The learning model is one of the important components in learning. There are several important reasons development of learning models, namely: a) effective learning models are beneficial in the process of learning so that learning objectives are more easily achieved, b) learning models can provide useful information useful for students in the learning process, c) variations in learning

models can provide a passion for learning students, avoiding boredom, and will have implications for the interests and motivation of students in following the process learning, d) developing a variety of learning models is very urgent because of differences in characteristics, personality, learning habits of students, e) the ability of lecturers/teachers to use the model learning is also diverse, and they are not fixated only on certain models, and f) demands professional lecturers/teachers have the motivation and spirit of renewal in carrying out their duties/ profession [4]. Using an inappropriate learning model can cause student boredom in following the learning process; the material is poorly understood and makes learning monotonous so that students are less motivated to study [5]. The selection of the learning model used in the classroom can affect mastery of the material being taught and student learning outcomes. However, in reality, learning that is often used in the teaching and learning process in the classroom in almost all subjects is conventional learning [6].

In addition to the learning model, another factor that also influences learning success is the selection of learning strategies. Along with technology development, learning strategies also shift, and various strategies emerge information and communication technology-based learning from e-learning models, smart classroom technology, virtual classroom, blended learning [7]. The use of communication technology has a significant role. The development of learning strategies in education is in dire need of innovations [8]. Blended learning mixes two or more strategies or learning methods to get

expected learning outcomes [7]. Blended Learning was originally used to describe subjects that tried to combine face-to-face learning. Blended learning combines *face-to-face* learning and learning computer-based or online learning, which is more commonly known as *e-learning* [8]. The term blended learning was originally used to describe subjects that combined face-to-face learning with online learning [9].

Several research results have been carried out, and blended learning strategies are proven to improve learning outcomes and motivation compared to traditional learning strategies [10]. Based on the various statements above, the author will examine the development of a learning model that integrated with a blended learning-based learning. Syntax PONTA Learning Model consists of five stages, namely: (1) Preparation; (2) Observation; (3) Negotiation; (4) Transformation; and (5) Application. The PONTA Learning Model syntax is designed to be continuously interrelated between the first stage and the next so that it provides direct experience for students. The purpose of this research is to find out the validity of the learning model that has been developed.

2. METHOD

This type of research is research and development (R&D). Research and Development is a research method used to produce specific products and test their effectiveness [11]. This research was conducted at Vocational High Schools (SMK) 2 Makassar and Vocational High Schools (SMK) 3 Makassar. The subjects of this study were students of class XII. The subject matter taught in Environmental Occupational Health and Safety. The Blended Learning-based PONTA Learning Model is modified from various syntaxes of existing learning models. The validity of the learning model is assessed based on the criteria in Table 1.

Table 1. Category Validity

Interval	Category
> 3.25 to 4.00	Very Valid
> 2.50 to 3.25	Valid
> 1.75 to 2.50	Invalid
1.00 to 1.75	Very Invalid

The data analysis technique used is descriptive analysis, by analyzing the score on the validation sheet related to the characteristics of the Blended Learning-based PONTA learning model in Vocational High Schools that has been developed. The PONTA Learning Model based on Blended Learning in Vocational High Schools is validated by two experts or experts in the field of learning.

3. RESULT AND DISCUSSION

The validation of the PONTA Learning Model based on Blended Learning in Vocational High Schools begins with the development stage, namely designing the PONTA Learning Model in the form of a draft guide containing the background, concepts, and characteristics of the learning model consisting of syntactic, social systems, reaction principles, support systems, instructional impacts, and the impact of the accompaniment which was further validated logically by two expert lecturers as validation assessors. The results of the validation of the learning model are in Table 2.

Table 2. Learning Model Validation Results

Indicator	Average Validator	Category
Rationalization of Model Development	3.25	Valid
Vocational Education and Relevant Learning Theories	3.75	Very Valid
New Paradigm of Vocational Learning in Indonesia	3.83	Very Valid
PONTA Learning Model based on Blended Learning	3.25	Valid
Implementation of the PONTA Learning Model based on Blended Learning	3.00	Valid
Overall Average	3.42	Very Valid

Based on the validation results that have been carried out, it can be concluded that the PONTA Learning Model based on Blended Learning in Vocational High Schools has been declared "Very Valid". The suggestions from the validator are in Table 3.

Table 3. Revision of Learning Model

Suggestion	Revision
The background and objectives of developing the learning model have not been seen.	The background and objectives of developing the learning model are further clarified, namely developing a learning model that involves active students individually and in groups, dares to express ideas and ideas, and can apply them in everyday life
The purpose of developing the learning model is not yet specific with the instructional impact; the name of the	The purpose of developing the learning model is more specific so that it is coordinated with the instructional objectives and provides an explanation of naming the learning model.

Suggestion	Revision
learning model must be explained why.	
The learning theory that underlies the learning model developed is necessary added.	Explain the learning theory that underlies the development of the learning model at each stage in the developed learning model guide.
The learning model support system developed needs to be clarified.	The learning model support system developed is the existence of sufficient reading materials for each student; the school environment also supports learning resources so that it is very supportive for the development of learning models.

Syntax	Description
	<ul style="list-style-type: none"> Students make agreements and understandings.
Transfer	<ul style="list-style-type: none"> The teacher explores students' reasons/arguments to construct knowledge. The teacher gives simple questions that students can quickly solve. The teacher gives counter suggestions to students. The teacher transfers the concept of learning based on the results of student negotiations.
Apply	<ul style="list-style-type: none"> The teacher gives a scientific view. The teacher and students conclude the learning outcomes. Students apply the knowledge that has been obtained based on the learning outcomes.

4. CONCLUSION

Based on the results of research and discussions that have been carried out, it can be concluded that the PONTA Learning Model based on Blended Learning in Vocational High Schools is declared to be very valid and can be used. A learning model is a systematic procedure or pattern that is used as a guide to achieving learning objectives in which there are strategies, techniques, methods, materials, media, and learning assessment tools. The characteristics of the Blended Learning-based PONTA Learning Model in Vocational High Schools are described as follows.

4.1. Syntax

The learning syntax in the PONTA Learning Model based on Blended Learning in Vocational High Schools can be seen in Table 4

Table 4. PONTA Learning Model Syntax

Syntax	Description
Preparation	<ul style="list-style-type: none"> Learning tools are available. The teacher designs the subject matter using a guidebook. Prepare students for learning.
Observation	<ul style="list-style-type: none"> The teacher opens the learning process The teacher observes the students' condition to identify their initial abilities. Teachers deliver learning materials to students.
Negotiation	<ul style="list-style-type: none"> The teacher explains the problems faced. Students study the problem well. Students conduct discussions and negotiations to reach an agreement.

4.2. Social System

The social system that applies in this model is that students are given the freedom to express their opinions, provide comments, share ideas, and ask questions in discussions. There is an interaction between students when discussing and between groups during presentations. There is interaction between teachers and students when making conclusions, and teachers and students do feedback. In this study, students are expected to analyze the concepts studied and their relationship to everyday life.

4.3. Reaction Principle

The reaction principle in the Blended Learning-based PONTA Learning Model is the reaction principle is the teacher functions as a learning manager such as guiding students to read the subject matter to be studied, organizing students to discuss, monitoring students when students and their group members present the results of discussions in front of the class.

4.4. Support System

Support systems for implementing the Blended Learning-based PONTA Learning Model in Vocational High Schools are Learning Plan, Manual Book, The Assessment Sheet.

4.5. Instructional Effect and Natural Effect

The instructional impact of applying the Blended Learning-based PONTA Learning Model is an increase in learning outcomes in the subject of Environmental Occupational Safety and Health. At the same time, the accompanying impact is activeness, independence, and a modern atmosphere in learning.

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