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# Perception of Prospective Physics Teacher to the Model of Learning Based on Local Wisdom

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**Abstract.** Phenomenology research has been conducted that aims to identify the perception of prospective physics teacher to the model of learning based on local wisdom. The participants of this study consist of higher physics education students who have followed the courses of Physics Learning Strategy, Physics Curriculum Study, Learning Models, and Microteaching with the content of lecturing materials on the learning model based on local wisdom. The participants are 12 prospective teachers chosen based on their desire and interest of this learning model. The results of this study showed that the elements of learning model need to be taught at class room to grow Indonesian gold generation in 2045. The conclusion of this study is that prospective physics teacher agreed to the model.

## 1. Introduction

The importance of character education in the students of primary and secondary school educators, the Government of Indonesia has published a presidential Regulation Number 87 years 2017 about Strengthening character education. One of the purposes of such regulations is "developing national education platform that put character education as the main soul in organizing education for Learners with support public involvement through the formal line of education, nonformal, and informal by attention cultural diversity of Indonesia". Long before the existence of these goals, in 2014 researchers have developed a model of learning that integrates the local wisdom of local people as the basis in physics learning so found the model-based learning, wisdom local character and to enhance the learning outcome of students [4]. Joyce, Weil, & Shower (1992) the learning model suggests that, in addition to the rational also has 5 (five) elements of other models, i.e. (1) social system; (2) the principle of reaction; (3) syntax; (4) support system; dan (5) the impact of instructional and accompanist. On the model-based learning local wisdom sixth element model shown as in Figure 1. the following.



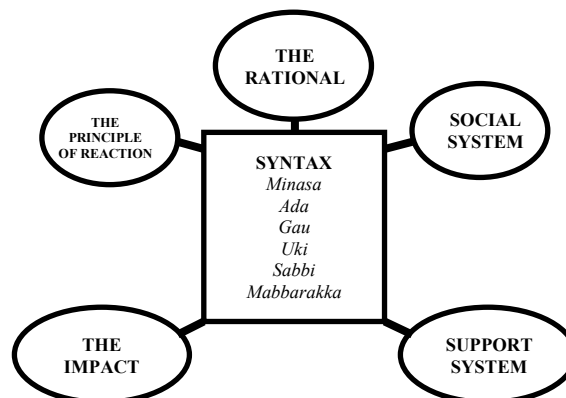


Figure.1.Elements Of The Model-Based Learning, Local Wisdom

Model-based learning local wisdom has been in an adaptation by some researchers for the final task of the research. In addition, research results are also used as a reference in the implementation of the lecture, included on the physics learning strategies courses, Review The Curriculum of Middle School, Learning models, and Microteaching. The reference is realized in the form of several books which are already registered in the National Library of the Republic of Indonesia, namely: (1) Model-based learning local wisdom to improve the character and results of the study; (2) the Microteaching: Model-based learning local wisdom; and (3) science education-based culture "Mandar". All sources and references have been socialized to prospective educators physics at Department of physics, physics education studies program, Faculty of mathematics and natural sciences, State University of Makassar. Next, in order to obtained information on whether local wisdom-based learning model can be applied by prospective educators in General, and specifically physics educator candidate, then the problem is focused on research is how prospective educator perceptions toward physics local wisdom-based learning model? So the purpose of this research was to obtain a description of the candidate's perception of physical educators toward model-based learning, local wisdom.

[1] stated that learning by integrating indigenous knowledge (local) an area suited to preparing learners face the knowledge of science and the environment in a country that has a variety of tribes and cultures. In line with that, [3] in his research stating that implementation of the learning-oriented local wisdom can foster an appreciation of students taking action against a form of local wisdom. Both the statement giving the reinforcement that the local wisdom has an important role in learning, especially for the people of Indonesia who composed some of the tribal and cultural diversity.

In addition, [2] in her research shows that 85% of the results of the prospective educators are able to determine the relationship of science and local wisdom. They are capable of linking two domains, through reviews of literature, observation and interview. The results of the study indicate that a prospective educators are already capable of connecting science with local wisdom so that it can be assumed that a prospective educators already have a readiness to implement local wisdom in the implementation of learning.

## 2. Research Methods

### 2.1. Type of Research

This research uses qualitative research with the kind of Phenomenology which aims to identify prospective educator perceptions toward physics local wisdom-based learning model [9].

### 2.2. Time and Place of Research

This research was carried out for 6 (six) months of the academic year 2016/2017 conducted in the Department of physics, Faculty of mathematics and natural sciences, State University of Makassar.

### 2.3. *The Subject of Research*

The subject of research is the physics educator candidate had graduated in Physics learning strategies courses, Examination secondary school Curriculum, Learning models, and Microteaching and has interest and interest in the model local wisdom-based learning.

### 2.4. *Operational definitions of Variables*

Prospective educator perceptions toward physics local wisdom-based learning model in question is a statement of the candidate's interest in the form of physics educators agree or disagree accompanied reasons against the element model composed of rational, social system the reaction principle, support system, impact, and the syntax of the model-based learning local wisdom. The next statement is interpreted as the existence of a physical educator candidate wishes to apply model-based learning, local wisdom.

### 2.5. *Data sources and analysis*

The data in this study were obtained from a physics educator interested candidates apply local wisdom-based learning model. As for the data obtained were analyzed qualitatively by interpreting the statements of prospective educators physics with description of the reasons given and based on the results of the interview are not structured to the subject of research. Next to the subject desiminasi conducted research on the interpretation of the results have been summarized researchers.

## 3. **Result and Discussion**

In this study, the data of the research results obtained are the written statements of prospective educators against physics local wisdom-based learning model. As for the results of the data analysis physics educator candidate statement is as follows. Rasional model pembelajaran berbasis kearifan lokal

### 3.1. *Rational*

A physics educator's candidate to become the subject of research, overall giving a statement of consent to the rational model of learning-based local wisdom. The whole subject of research gives the same reason, namely: (1) the existence of a shift in the character of learners who have been contaminated with modern cultures; (2) a sense of love of culture owned learners start eroded; (3) the pleasure of learners to culture outside is greater than the local culture; (4) students can't interpret the local culture as the real meaning; and (5) local wisdom is an identity that should be attached to the learners. It is supported by a restatement of [7] that base that can be used to increase the character of learners is the sublime values of Indonesia, one of which the source is local wisdom. Based on these reasons, it can be stated that the prospective educators understand physics well about local wisdom-based learning model in terms of the rational model so that they provide a statement of consent to the model local wisdom-based learning.

### 3.2. *Social System*

A physics educator's candidate to become the subject of research, overall giving a statement of consent to the social learning model-based system of local wisdom. The whole subject of research gives the same reason, that the local wisdom-based learning model is able to provide opportunities to learners and educators to implement behavioral characteristic that corresponds to the values through a process of cultural interaction, both between students or between educators and learners. Based on these reasons, it can be stated that the prospective educators understand physics well about local wisdom-based learning model in terms of social systems model so that they provide a statement of consent to the model local wisdom-based learning.

### 3.3. Principle of Reaction

A physics educator's candidate to become the subject of research, overall giving consent to the statement of principle the reaction of local wisdom-based learning model. The whole subject of research gives the same reason, namely: (1) the principles of model-based learning, raksi local wisdom make learners more active because educators provide an appropriate response to the activity of learners; (2) it educators in reaction model prisnisp be a good role model in responding to any form of activity the learners; and (3) it educators in reaction principle model being friends, teachers, and parents for learners so that learners acquire the appropriate response is needed. Based on these reasons, it can be stated that the prospective educators understand physics well about local wisdom-based learning model in terms of the reaction principle of the model so that they provide a statement of consent to the model local wisdom-based learning.

### 3.4. Support System

A physics educator's candidate to become the subject of research, overall giving a statement of consent to the model-based learning support system of local wisdom. The whole subject of research gives the same reason, namely: (1) model-based learning support system of local wisdom in the form of a book learner, packed with based on the circumstances and the wisdom of local communities making it more easily understood by learners; (2) the support system in the form of Learning implementation plan (RPP) also contain elements of local wisdom so educators are more practical in carrying out the study; and (3) through the support system, educators can use various extant local wisdom as learning resources so as to enhance the appreciation of learners towards local wisdom. Based on these reasons, it can be stated that the prospective educators understand physics well about local wisdom-based learning model in terms of the reaction principle of the model so that they provide a statement of consent to the model local wisdom-based learning.

### 3.5. Impact

A physics educator's candidate to become the subject of research, overall giving a statement agreeing to the impacts of local wisdom-based learning model. The whole subject of research gives the same reason, namely: (1) appraisal educator in model-based learning local wisdom as the impact of learning does not only focus on the achievement of the learning results of cognitive achievement, but also on the behavior of characteristic learners; (2) the impact achieved on participants with local wisdom-based learning model is the characteristic behaviors like honesty, and solidarity that comply with the local wisdom of local culture; (3) with the local wisdom-based learning model, students are trained in solving problems in everyday life and have a positive attitude in dealing with the problem; and (4) impact of local wisdom-based learning model is achieved not only develop the competence of learners, but can also develop and preserve the local culture of the local community. This is in line with the philosophy of Ki Hajar Dewantara [5] that educators should be *ing ngarso sung tulodo, ing madya mangun karso, tut wuri handayani* and meaningful if it became exemplary in front, if in the Middle became a supervisor, and if in the later became a motivational speaker. In addition, learning that integrates with local wisdom can foster a sense of love towards their local wisdom learners. Based on these reasons, it can be stated that the prospective educators understand physics well about local wisdom-based learning model in terms of the impact of the model so that they provide a statement of consent to the model local wisdom-based learning.

### 3.6. Syntax

A physics educator's candidate to become the subject of research, overall giving a statement of consent to the syntax of the model-based learning local wisdom. The whole subject of research gives the same reason, namely: (1) phase "*minasa*" (intention) in the syntax of the model-based learning local wisdom to train the learners formulate learning objectives independently so that learners more motivated to

achieve the goal of their learning; (2) phase "ada" (phrase) in the syntax of the model-based learning local wisdom to train learners to appreciate each other's opinion between fellow and training ways of discussing who characterised to obtain a decision. [8] in the Bugis language expression is "assama iyyako muabbulo sipeppa mupenrikengnga nanre manasu" (conference to take a decision, because the decision that I perform); (3) the phase "gau" (work) to train the learners perform scientific investigations to obtain data that supports the truth of opinions or expressions that exist in there. According to [6] that the investigation activities in the implementation of learning, can serve as a means to enhance the character of the different types of learners; (4) the phase "uki" (writing) to train the learners make a report of the results of the investigation are honest; (5) phase "sabbi" (witnesses) to train the learners to become observers at the same time the evaluator against the results of the discussion and penyeldidikan group of learners; and (6) a phase of "mabbarakka" (blessing) train the learners develop understanding about the learning material as well as being able to relate the subject matter with the problems of everyday life. Based on these reasons, it can be stated that the prospective educators understand physics well about local wisdom-based learning model in terms of the syntax of the model so that they provide a statement of consent to the model local wisdom-based learning.

#### 4. Conclusion

Summary obtained in this study was prospective educators perceive physics agree against rational, social system, the principle of reaction, the support system, the impact, and the syntax of the model-based learning, local wisdom.

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