“WAYANG SAINTIS” THE LEARNING MEDIA BASED ON CULTURE AS AN ILLUSTRATION OF SCIENTIST FOR PHYSICS TEACHING

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BACKGROUND

Physics is one of the oldest academic disciplines which study about natural phenomena (Pratama et al, 2014). Recently, physics is considered as one of the subjects that are difficult for student in junior and senior high school. Physics is a subject that full of theory and mathematical expression that make some problems to student such as the monotonous class, bored, and also less enthusiast.

Therefore, it takes a special approach to learning physics. One of the approach is cultural approach through puppet. Puppet is an artistic heritage that should be learned by people because puppets providenoble values and paragon which can be learned by the audience.

Because of the uniqueness of puppet, it can be used as a learning media in physics teaching. In this case, the brand new puppet called Wayang saaintis. Teacher can deliivered interesting presentation using Wayang Saintis, and it will make the learning process more interesting, fun, and enjoyable.

This paper will explain : (1) The concept of Wayang Saintis, (2) The procedure to make Wayang Saintis, (3) The implementation and the implication of Wayang Saintis as learning media based on culture for physics teaching.

METHODOLOGY

The type of this writing is descriptive qualitative because the writer want to interpret and make a description about concept of acculturation culture in physics teaching, the procedure to make Wayng Saintis, the implementation, and the implication of Wayang Saintis as learning media for physics teaching. Dale (2009) said that some steps of qualitative descriptive writing consist of : 1. Choose a problem that we want to discuss, 2. Formulate the problem, 3. Collection data, 4. Analyze the data, 5. Make a conclusion and suggestion.

RESULTS/DISCUSSION

Concept

Wayang Saintis is puppet featuring a scientist dressed with Indonesian traditional clothes. This can be use as a solution to problems of difficulty in learn physics. Teacher use the puppet to explain the chronology, history, and the invention of the concept in physics. Besides, during the learning process, students not only learn physics, but at the same time they also study about culture in Indonesia.
Procedure making Wayang Saintis

There are some steps to make these puppet; First, make the design of the figure. Make sure that the hands and foots can be separate. The figure is a scientis dressed Indonesian traditional clothes. Second, print the design, then sticked it with yellow board. The yellow board make the puppet stand upright and strong. Third, cut it according to the pattern. Fourth, hole in the left and right shoulders, hand ends, the left and right tight ends, and foot ends. Fifth, linked using yarn for the shoulders with hands and tight ends with foots. Next, clamp the bamboo on each hand puppet and fixed the bamboo stick behind the puppet.

Implementation

In this case the teacher acts as a puppeteer. Teachers use the puppets as props to present the material of physics through a story that has been packaged before. For example, teacher want to present about modern physics. One of famous scientis in modern physics is Albert Einstein. Teacher take the puppet of Albert Einstein (See Figure 3) and start to tell the story how Albert Einstein got the theory E=mc\(^2\). In the middle of the lesson, the teacher give an intermezzo and present the information about the name, philosophy and cultural values in traditional clothes that dressed on Albert Einstein.

Implication

The implications of the implementation of Wayang Saintis are learning to be interesting and impressive, making the material easier to understand by students and also get knowledge about the Indonesian culture.

REFERENCES