Applying information and communication technology on learning model innovation of character education

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Abstract. This research aims to Character education material which with the indoctrination method in formal institutions will not build national character, because character implementation can only be built based on habits, spiritual and affective values. This study aims to design a Character Education learning model for IT-based Civics subjects to strengthen the character of junior high school students in the Special Region of Yogyakarta (DIY). The method used is the study of literature, observation, in-depth interviews (in-depth interviews) and data analysis. The subjects in this study were 2 junior high school students in DIY, located in Bantul and Sleman districts, namely SMP Tridadi Sleman and SMP PGRI Kasihan. The research roadmap is made for 1 (one) year, which includes initial investigation, school mapping, analysis of mapping results, designing learning models, designing learning media up to the implementation to junior high schools in DIY which are the subject of research, while data analysis techniques to be used are models integrated between quantitative and qualitative approaches.

1. Introduction

Character education is expected to be able to meet the needs of early adolescents, such as junior high school students, to strengthen social competence. In addition, youth involvement in character education is inseparable for their learning in education [1], [2]. Therefore, social involvement is needed so that character education becomes more effective [3].

National character development can be done through the development of a person's individual character. However, because humans live in a certain social and cultural environment, the development of a person's individual character can only be carried out in the social and cultural environment concerned [4]. That is, character development can be carried out in an educational process that does not release students from the social, community, and national culture environment [5]. Education towards the formation of the national character of students is the responsibility of all teachers. Therefore, the guidance must also be done by the teacher [6]. Thus, it is not correct to say that educating students to have national character is only delegated to teachers of certain subjects [3], [7]. The notion of character education at the basic level should focus on attitudes and skills compared to other sciences [8]. Basic level character education must form a strong foundation for the integrity of the educational series. Because the higher the level of education, the wider the variety of knowledge that is obtained from a
person and the results will be even greater if there is no basis for understanding character education that is applied from an early age [7], [9].

Learning model innovation is very important, along with the needs of modern society in obtaining information and solving communication problems [10]. The speed, ease and accuracy of information required by today's society can be fulfilled by utilizing information and communication technology [6], [11], [12]. Therefore, studying character education in the context of that multicultural society be more effective by using information and communication technology [13], [14]. Besides that, it can also be used to increase students' knowledge and experience of cultural diversity in society [8], [15]. Knowing various social phenomena as described above raises an important question that is interesting to find answers to. This question is whether there is something wrong in our national education system because there are still many educational problems that must be resolved and solutions to be found, to be able to shape children's character in order to revitalize national identity as technology currently developing in the younger generation starts from the junior high school level.

2. Method

The research method used is the method of development (research and development). The development method is carried out based on an industry-based development model, the findings of which are used to design products and procedures, which are then systematically field tested, evaluated, refined to meet certain criteria of effectiveness, quality and standard.

2.1 Method of collecting data

Data collection in this study uses the following steps:

a. Study of literature; Literature studies are conducted to explore sources of information through literature searches, particularly research results published in national and international proceedings / journals.

b. Observation; Observations are made by direct observation of everything that has to do with the object of research

c. Interview; Interviews are used to obtain and explore information about informants' experiences in the character problems of junior high school students. The interview was conducted by the teacher concerned, with the assumption that the teacher carried out the character learning process at school.

2.2 Method of Data Analysis

Data analysis methods to be carried out in this research are:

1) Trial

At this stage is testing the learning model for junior high school students. In the trial process, researchers act as teachers by using products that have been validated by experts and testing the effectiveness and efficiency of the products. The measurement of whether a model is effective or not is done by comparing the initial score in the pre test with the final score in the post test. Efficiency testing is carried out by survey design, where the researcher will develop an instrument to assess the learning process. The efficiency test is very useful as a model evaluation material to find out which parts of the process are not in accordance with the plan and to find out which parts of the process need to be improved.

2) Analyze the results

The trial data that had been collected were then analyzed. Analysis of the effectiveness test is carried out by statistical tests with the help of the SPSs program. Efficiency test analysis will be carried out using descriptive statistics.

3) Reviews

The activity carried out at this stage is to review the learning device then revise it if there are inputs and suggestions that are obtained.
3. Research Design

The research stages carried out were initial investigations, mapping school conditions, analyzing problems related to character education, designing ICT-based character education models, and compiling research outputs in the form of scientific articles, as shown in Figure 1.

Figure 1. Research Design

Junior high school students are students who have a high curiosity intensity and like to hear or read and in adolescence in this millennial era, it is necessary to provide an effective learning model so that character education told in the story can attract students so that it will succeed in influencing the way students are learn, think, and behave. In order to instill character values based on the nation's culture, we use a video learning model which teaches about the multicultural values of Indonesian culture and high levels of diversity. It is expected that through the students role-playing, students will live more in the values of Indonesian character so that it will be easier to implement.

4. Results and Discussion

The implementation of character education in schools is carried out not only by Civics Education teachers but also attached to various subjects. Civics Education learning is indeed the most dominant, it is expected to be able to instill the values of Indonesian character, therefore it is a fun learning model. The number of Civics Education teachers at SMP Tridadi is 3 people while at SMP PGRI there are 2 people, from the results of the research it is known that some teachers have not been optimal in using information media in inculcating character values to students, which is mostly used with PPT media, internal media. form of fairy tales has not been used. The ability to develop learning models for teachers, especially Civics Education teachers, still needs to be given considering that Civics Education learning given from Elementary School will be boring if teachers do not develop interesting and fun learning models and strategies. For SMP N 3 Tridadi, with adequate facilities, it can actually be done to improve teacher performance in developing learning models, but it still needs training and mentoring in order to be able to use IT properly to support the quality of learning. However, for SMP PGRI Kasihan Bantul, there is a lack of facilities and infrastructure that support teaching and learning activities in schools. Because in an era like now teaching and learning activities are required to involve technology, therefore the teaching staff, curriculum, school facilities and infrastructure must also be ready to lead there. But in reality schools have not been able to make it happen because of several factors, including inadequate
school facilities such as good internet access, comfortable classrooms, proper computer lab space and others.

The inculcation of character values outside of learning in junior high school is carried out by the school, namely smiling, greeting, greeting every time students meet the teacher, reading the holy books of each religion on certain days, singing songs Indonesia Raya, completes a personality questionnaire every day and will report it to the parents of students, assessing the attitudes and behaviour of their own friends to be material for self-reflection of the students concerned and others. Therefore, in order to develop a learning model, a teacher must be able to adjust the model he chooses to the student's condition, material, learning, and existing facilities. Therefore, the teacher must master several types of learning models so that the teaching and learning process must run smoothly and the goals to be achieved are quickly realized.

![Figure 2. Making process of instructional video](image_url)

Figure 2. Making process of instructional video

One of the learning media used is the instructional video which the making process is presented in Figure 2. Coordination between teachers is still limited to synchronizing the subject matter in each teaching and learning activity, administration of learning equipment, making daily assessment questions and methods adapted to the material to be delivered (based on ICT assignments, group work, games, etc.) for Civics Education learning, video shows are adjusted to the material which will be delivered (in the form of a documentary film, examples of events that occurred in the environment), while for animation the teacher still needs to learn more.

5. Conclusion

The inculcation of character values outside of learning in junior high schools is among others carried out by the school, namely proclaiming to cultivate smiles, greetings, greetings every time students meet the teacher / teacher, read the holy books of each religion on certain days, singing Indonesia Raya. The use of instructional media has not been optimally carried out for character education, to achieve quality learning and to instill student character education requires teacher skills in using learning media, so that it is easy to learn and implement by students. Therefore, teachers need to develop learning media more optimally. Learning media through video learning models play role-playing videos that teach about the multicultural values of Indonesian culture and uphold diversity. It is hoped that through the students role-playing, students will more deeply appreciate the values of Indonesian character so that it will be easier to implement.
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