# REQUIREMENTS ANALYSIS OF PROBLEM UNDERSTANDING OF BIOLOGICAL TEACHERS RELATED TO DEVELOPMENT OF CHARACTER EDUCATION BASED LEARNING

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#### **Abstract**

This study aims to examine the understanding of biology teachers in class XI Public High School related to the development of character education-based learning tools in the form of syllabus, lesson plans, LKPD, evaluation, and handouts. The research subjects were biology teachers at Public High School 1, Public High School 2, Public High School 3, Public High School 5, Public High School 10 Samarinda. Data collection was carried out by interviewing, distributing questionnaires, observing, documenting. The data obtained were analyzed descriptively and interpretively based on the percentage. Results of the analysis showed understanding relevant biology teacher development role of learning tools based character education It is shown from the results of the analysis to answer questions related to the introduction of character education learning 41.67 percent answered and 58.33 percent did not answer, the application of character education learning 33.33 percent answered and 66.67 percent did not answer, describing the stages of character education learning 16.67 percent answered and 83.33 percent did not answer, the empowerment of character education was 33.33 percent answered and 66, 67 percent did not answer. There are steps taken to improve teacher understanding in applying inquiry learning models by developing valid, practical, effective character education learning tools.

Keywords: Understanding Biology Teachers, Learning Tools, Character Education

Education in Indonesia is regulated in Law Number 20 of 2003 concerning the National Education System which has a vision of realizing the education system as a strong and authoritative social institution to empower all Indonesian citizens to develop into quality human beings so that they are able and proactively respond to the challenges of an everchanging era. (Arifin, 2011). Then the educational objectives that have been formulated in accordance with Law no. 20 of 2003, Article 3, which is to formulate that national education functions to develop capabilities and shape the character and civilization of a dignified nation in the context of educating the nation's life, aiming to develop the potential of students to become human beings who believe and fear God Almighty, have noble character, healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens, for the development of the potential of students to become human beings who believe and fear God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens (Theodora Elsje 2018).

Educational development efforts are always directed to have a positive impact on character development. This development must be carried out without neglecting education, therefore good and quality education is education that prepares students to be able to solve problems faced in everyday life, including character education. Currently, the character development of Indonesian students is still far from the expectations and goals of national education because the learning process applied so far has been more dominant in emphasizing understanding without action and character strengthening (Widayanto, 2012).

Schools in general are places for teachers and students to interact in the learning and teaching process and where the development of student resources is formed, therefore teachers have a main role, namely as a learning resource to prepare a mentally active learning environment that is active thinking (*minds-on*) and physically active or actively working (*hands-on*). Learning is very important to develop knowledge and skills that can hone and sharpen skills in solving problems in learning.

A teacher needs to have the ability and skills in designing, creating and implementing various strategies, approaches, and learning models that can be used in class by adjusting the conditions and circumstances of students. With the existence of interests and talents and according to the level of student development which is then followed by the use of appropriate learning models, an action will be created that will become a habit of students in learning, namely character. That is one of the work actions that need special attention from teaching staff who are supported by educational institutions.

The learning device is a guide or guide that determines the direction of the learning activities carried out by the teacher during learning activities. This is important because the learning process is a systematic and patterned action between teachers and students. There are still many teachers who are confused in achieving learning objectives and have undirected learning, this is because the teacher does not complete the learning tools needed. Therefore, learning tools can be used as a determinant in providing guidance that a teacher must do in the classroom. In addition, the existing tools need the development of learning tools that are owned and will provide facilities and the ability for teachers to develop teaching techniques and become the basis for designing, making and obtaining better devices.

The conditions that occur in the field explain that not all biology teachers have learning tools besides that not all teachers understand the preparation of learning tools, this is evident that the existing devices do not match the correct components of the equipment and there are some teachers who cannot demonstrate learning tools used. Based on the description needs to be assessed on the problem - the problem or problems that are often experienced teachers to prepare the learning device, of course, a good learning device is a device that integrates the values of character education that can be implemented in learning with students.

In biology learning, it is necessary to develop a scientific process that can encourage students to solve a problem in the learning process, in this case, general practice activities carried out by the insertion of character values. Information from the field teacher of study that the development of learning tools has not been carried out, this is due to the large number of activities carried out by the school which can also involve the teacher in implementing these activities, besides that there is also a lot of time off on certain days so that the time to think about developing the device is very limited. The character of students indirectly in the learning process sometimes appears spontaneously without the student realizing it but this cannot be

measured because it is only visible with the naked eye without any instruments as a tool to measure these characters.

The teacher's recognition in the teaching and learning process there are still some students who have not participated in the learning, this can be seen from the discipline of students when they enter the class, some are on time and some are still late, some students do not bring notebooks so there is an opportunity for students not to take notes learning material, there are still friends who chat with friends while the teacher explains the learning material in the classroom.

Actions that must be used to optimize learning must have good tools and have new strategies or breakthroughs, one of which is by developing learning tools based on character education. This learning model is a series of learning activities that involve maximally entire ability of learners to search and investigate in a systematic, critical and logical as well as the appearance of the character that makes a good habits on Behaviors students in class. The learning model in question is learning that is integrated with character values that will be applied in learning and will become a good habit for students.

Character education is education that applies character values and is contained in learning activities to develop student potential in achieving learning goals. Character education in adolescence, especially high school aims to develop students' potential in learning activities, therefore the task of educators can condition a good learning environment to develop the character that exists in students and of course direct students to carry out learning optimally referring to a series of attituded, behaviors, motivations, and skills. (Musfiroh 2008).

Character education also aims to improve the quality of the implementation and results of education in schools that lead to the development of the character and noble character of students in a comprehensive, integrated, and balanced manner, in accordance with graduate competency standards. Through character education, students are expected to be able to independently improve and use their knowledge, study and internalize and personalize the values of character and noble morals so that they are manifested in daily behavior.

This research has a specific objective to identify the problems of teachers and students at school so that there is a need for a needs analysis regarding the understanding of biology teachers related to the development of character education-based learning tools, to find out the teacher's understanding in the development of learning tools in question is to fill in a questionnaire, especially for class XI high school teachers in Samarinda.

Based on the above, it should be observed at Public High School Samarinda in order to determine how understanding biology teacher High School to the development of learning tools based character education that includes whether the teacher m Introducing character education, how to implement character education, how to decipher the stages character education, how to empower character education.

#### **METHOD**

The approach in research uses a mixed method, research and development. However, the focus is on needs analysis which is part of the research and development procedure which refers to the development procedure of Borg and Gall (1983) in Wahyu (2017). This needs analysis comes from the results of preliminary observations in the field. The research subjects were teachers at Public High School 1, Public High School 2, Public High School 3, Public High School 5, and Public High School 10 Samarinda. The teacher will fill out a questionnaire. The data collection technique in this study used a needs analysis instrument for teachers. Respondents involved were all biology teachers who provided information about the learning tools at school, totaling 12 people. The data that has been collected from those filled in by the respondents will be analyzed descriptively qualitatively

### **DISCUSSION**

The results of observations in general, the facts in the field show that the use of learning tools in the form of syllabus, lesson plans, student worksheets, *handouts*, and evaluation is still not optimally utilized, which is very low if we look at the use in class, the existing material needs to be supported by adequate tools. Other than that the device in question is the need to integrate character education. This is because the learning tools have an important role in determining the direction of learning in accordance with the needs of the school.

This problem occurs because of the lack of teacher innovation in designing learning devices that can follow the needs of students, if there is no innovation, the device will be rigid so that the devices used from time to time do not follow the problems faced by students. This can be seen from the questionnaire given that there are some teachers who do not understand on in-depth learning devices and many teachers have yet to develop the role of learning and still there are some teachers who do not understand about character education. The research data and the observed variables are as follows:

## 1. The identity of Male / Female Teacher

| No. | Aspects of Identity | Score (%)                         |
|-----|---------------------|-----------------------------------|
| 1   | Rank / Class        | IVA 58.34%, IVB 8.33%, IIIC 25%,  |
|     |                     | No Class 8.33%                    |
| 2   | PNS / Non PNS       | PNS 91.67%, Non PNS 8.33%         |
| 3   | Gender              | Male 8.33%, Female 91.67%         |
| 4   | Last education      | S1 33.33%, S2 66.67%              |
| 5   | College             | Mulawarman University 91.67%, Non |
|     |                     | Mulawarman University 8.33%       |
| 6   | The nurtured class  | X 33.33%, XI 50%, XII 16.67%      |

The results of the identity analysis above indicate that there is a diversity that includes from rank / class to class being cared for so that it can be used to obtain information from various teachers who teach in class about problems in developing character education-based tools. The teacher involved is a teacher who teaches biology subjects consisting of class X, XI, XII so that they can help to get information about the needs of researchers.

## 2. Teacher Understanding Related to Character Education

|   |  | Yes    | Not    |
|---|--|--------|--------|
| 1 | Do you already know and understand the term character?  a. I did  b. Not yet   | 41.67% | 58.33% |
| 2 | Have you ever applied character-based learning?  a. I did  b. Not yet          | 33.33% | 66.67% |
| 3 | If you have implemented character-based learning, describe the steps?          | 16.67% | 83.33% |
| 4 | Do you understand and know about empowering character education? a. Yes b. Not | 33.33% | 66.67% |

Based on observations made by researchers at five schools in Public High School 1, Public High School 2, Public High School 3, Public High School 5, and Public High School 10 Samarinda, it shows that there are several problems experienced by teachers related to character education, namely: a. Some teachers still don't know and understand the term character, b. Most of the teachers still have not implemented character-based learning, c. The teacher is still unable to describe the stages of character education learning, d. Teachers still do not understand the empowerment of character education. The information from the description above shows that this description can be used as an initial study in developing learning tools based on character education, of course, it must involve schools and teachers as sources of information, the schools involved in this research are Public Schools in Samarinda with 12 teachers using the material. Circulatory system in humans, because this material is very suitable for assessing character education accompanied by student practicum activities.

Facts in the field also show that character education is currently without the knowledge of the teacher, a small part has already implemented it and most have not implemented it, in practice the teacher still has problems, namely the absence of an assessment instrument guide used by the teacher so that the character cannot be measured, the teacher's spare time at school This is not so adequate because of the busy activities at school, besides that, when viewed from the current curriculum, character education is important to be instilled in students' day at school as a form of forming a character with character.

The characters that have been formed in students will make it easier for students to carry out a meaningful learning process, meaning that the learning we want does not focus on the achievement of learning material but also on the emergence of student character on an ongoing basis so that it will become a good habit for students.

Koesoema (2012) states that although the definitions and praxis of character education vary in a glance, it is clear that it has long been an important part of the ups and downs and in and out of our national education curriculum, both implicitly and explicitly. Character education is always sought to be included in the national education curriculum at various levels and types, so that it is regulated in Article 3 of the Law on the National Education System, namely National education has the function of developing capabilities and shaping dignified

national character and civilization in order to educate the nation's life, aiming at to develop the potential of students to become human beings who believe and fear God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become responsible citizens.

With this statement, it can be seen that character education has been implicitly included in the school curriculum but in its implementation it is still not optimal because there are no guidelines and guidelines for implementing it in school. With the statement above, there are four ways in understanding the school character education, namely: a. character education as a special subject, b. character education as grouping subjects, c. character education is defined as a must from the state, d. character education is an educational process itself.

Character education also aims to improve the quality of administration and educational outcomes in schools that lead to the achievement of character building and noble morals of students as a whole, integrated and balanced, according to graduation competency standards, in order to achieve these goals, of course there must be a device guide containing and integrating the values of character education and embodied in classroom learning materials.

In relation to the problems above, Zubaedi (2011) argues that character education basically includes the development of a substance, process, atmosphere, or environment that inspires, encourages, and makes it easy for someone to develop good habits in everyday life. character education is not only related to right or wrong, but how to instill habits about the good things in life so that children have high awareness and understanding as well as care and commitment to determine virtue in everyday life, and packaged in form of development of learning tools based on character education .

According Nuraini (2016) based on the root of the problem in the field, it is necessary to have the right solution to overcome it by developing character education-based learning tools that can support teachers and students in teaching and learning activities so that the expected character always appears and becomes a committed habit, especially in learning materials that aim to make it easier for students to solve problems and can empower the character of students at school and outside of school.

It is suggested that the development of learning tools based on character education in biology subject matter. Strengthening character education must receive support from relevant agencies (Central, Provincial and City level Education Offices) so that it can be included in the national curriculum that is integrated in the subjects and tools to be used. There is training and support from the principal regarding strengthening character education that is integrated in subjects and learning tools so that it can empower student character.

### CONCLUSION

The conclusion from the results of this study is that the use of character education-based learning tools has not been applied in schools because of the limitations of teachers in understanding character education so that teachers will experience difficulties in implementing it in school. Second, there is no format or character education assessment instrument so that

teachers experience difficulty in assessing student attitudes according to character education guidelines.

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