Understanding & Applying Character Education In Chemistry: A Case Study Of 10th Grade High School In Indonesia

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Abstract
Indonesia tries to balance the quality of content learned and the quality of the characters one’ develops. Character education implemented to prepare good human resources in the future as golden generation of Indonesia 2045. Based on The Presidential Regulation no. 87 of 2017 on Strengthening Character Education, there are 18 character values that related to environment, nationality, connected with god, connected with others and connected with one’self. Understanding and applying character values in academic subject matter is very important, such as in chemistry. This paper focused on the integration of character which connected with one’self in chemistry lesson for 10th grade high school student and the respondents are chemistry teachers. 33.3% of respondent never read about the policy and 66.7% can not mention the total of character values. There are 9 chapters of chemistry and 9 values that assessed in this paper. The average is 50% for the dependability and ease of deployment of character values in every chemistry’s material, where the highest scores are curiosity and fond of reading. 43% of respondents had difficulty measuring and applying character values and 33.3% had not understood the assessment. These is caused by the lack of training and socialization, no assessment guidelines, the number of student in 1 class and the difficulty determining the benchmark of each student’s character.

Keywords: Character Education, assessment, teacher experience, chemistry, practice and praxis.
Introduction

The development of an increasingly advanced era is characterized by the increasingly rapid development of science and technology increasingly, especially information technology. The development of science and technology has a positive impact on humans, which makes it easier and makes human life more comfortable. For example, the invention of computers makes it easy for humans to write writing, store data, and even listen to music and movies. But on the other hand, the development of science and technology also has a number of negative effects on humans (Sultoni, 2016).

The problem of education in Indonesia is very complex because in all aspects there are problems that need to be resolved. Moral decline has become rampant in the world of education, making it a blurry portrait in the world of education. This can be seen from the proliferation of pornographic videos played by students, rampant student fights, cheating in national examinations, the number of drug cases that ensnare students, the number of motorbikes played by students and various other negative roles that can lead to national morality increasingly deteriorating (Maunah, 2015).

Character is a form of character, character, character inherent in one's personality that is formed from the results of internalization which is used as a basis for thinking and behaving so as to create individual characteristics (Tim Kompilasi, 2008: 682). Individual characters will develop well, if they get the right reinforcement, namely in the form of education.

The world of education today still has many problems. Even the distribution and quality improvement programs have not shown results as expected. The number of children of basic education outside the national education system is still very large. The quality of education is still relatively low. On the other hand, the challenges in various fields of life are getting heavier. The development of science and technology, especially in the fields of information, communication and transportation is very rapid, the escalation of free markets between countries and countries is increasing, and the climate of competition in various aspects of life is getting tougher (Suyitno, 2012).

The Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System (National Education System) has formulated the functions and objectives of national education. Article 3 of the Law states, "National education functions to develop the ability and shape the character and civilization of the nation with dignity in the framework of educating the life of the nation, aimed at developing the potential of students to become faithful and devoted to God, noble, healthy, knowledgeable, capable, independent, and become a democratic and responsible citizen. "The article is the basis for the development of character education for the formation of human character, especially the younger generation. This character education is expected to be applicable in all high school (SMA) subjects including chemistry subjects considering how important character education is.

Method

Seeing the implicit meaning of the title and the problems studied, this research is a type of quantitative research based on the experience of high school teachers
throughout Indonesia in teaching chemistry class X subjects which were studied using a questionnaire. The primary or primary literature reviewed in this study is Perpres No. 87 of 2017 concerning strengthening character education and character education journals (Bahri, 2015).

**Result**

Character education in learning must be prepared from the planning, implementation and evaluation stages of learning. In the planning stage, material, methods, media, learning resources, stages of learning, and evaluation must be prepared to support the implementation of character education. The learning component can help develop the types of characters that have been set according to the learning objectives to be achieved (Dianti, 2014). The questionnaire was filled by 39 respondents from chemistry teachers in Indonesia, 61.5% men and 38.5% women, aged 20 to 63 years. Most of the teaching of chemistry subjects in high school are S1 graduates with presentations as much as 79.5% while S2 graduates are as much as 17.9%.

Character education for students in teaching and learning activities is by integrating character values in each subject. The character values delivered are adjusted to character values based on Perpres 87 of 2017 (Santoso, 2014). Character values that need to be invested in students from Religion, Pancasila, Culture, and National Education Goals. The eighteen values are: 1) religious, 2) honest, 3) tolerance, 4) discipline, 5) hard work, 6) creative, 7) independent, 8) democratic, 9) curiosity, 10) national spirit, 11) love of the homeland, 12) appreciate achievement, 13) friendly / communicative, 14) love peace, 15) love to read, 16) care for the environment, 17) care for the social, 18) responsibility (Supranoto, 2015).

**Conclusion**

33.3% of respondent never read about the policy and 66.7% can not mention the total of character values. There are 9 chapters of chemistry and 9 values that assessed in this paper. The average is 50% for the dependability and ease of deployment of character values in every chemistry’s material, where the highest scores are curiosity and fond of reading. 43% of respondents had difficulty measuring and applying character values and 33.3% had not understood the assessment. These is caused by the lack of training and socialization, no assessment guidelines, the number of student in 1 class and the difficulty determining the benchmark of each student’s character.

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References


Presidential Regulation Number 87 of 2017 concerning character education.


