

Research Article

The advantages of humanistic science learning tools

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ABSTRACT

This study aimed to determine the advantages of humanistic science learning tools. The collection data was conducted by in-depth interviews and questionnaire. Data analysis techniques used namely: data reduction, data display, and conclusions drawing. The results of this study showed that the advantages of humanistic science learning tools were (1) making the teachers could teach Science easily, (2) providing high motivations to the teachers in teaching Science, (3) making the teachers more aware in developing the students' emotional, spiritual, and creativity potentials in Science learning, (4) Making the students felt happy to the Science learning, (5) Making the students more easier to understand the Science, (6) Motivating the students to learn Science, (7) Making the students more aware that the emotional, spiritual, and creativity potential had to be grown in science learning and (8) Opening students' horizons to develop their emotional, spiritual, and creative potential in their daily lives independently.

Keywords: Humanistic Science Learning Tools; Emotional Potential; Spiritual Potential; Intellectual Potential; Creative Potential;

1. INTRODUCTION

Education is the quality spearhead of the human resources. The main goal of the education according to Jacques Maritain (Svobodová, Zuzana, 2018)¹ is making the people: have wise character, always have good intentions, and have a sense of love for everyone. This is in line with the contents of Chapter 3 of the Law on the Indonesian National Education System Number 20 of 2003 which states that National Education functions is developing abilities and shape the character of students and the nation's civilization. Thus, it is seen that through education we hope that high quality human beings will be formed, both in material and spiritual field. Therefore, national education must be a top priority in national reform agendas. The color of life that we will be able to feel depends on the style and quality of the national education that is applied now.

What is the actual quality of our national education, especially in Science field? Has it reached the expected level? The quality of national education from an intellectual perspective, especially in the field of science, can be said still low. This is indicated by the low science ability of Indonesian students compared to the science ability of students from other countries based on the 2012 PISA analysis. Furthermore, based on the survey that conducted in 2004, 2005, and 2006, it is concluded that generally the students in Yuniior High School do not like science, do not like science learning, and do not like science material or science books. The results of this survey are certainly very surprising for author. Another thing, it's found that the students did not feel motivated to learn Science nor did they feel motivated by the teacher to study Science.

Based on these findings, I try to make Science Learning Tools that can make the students enjoy and motivated to learn Science by research from year of 2008 until 2010. This learning tool is named Humanistic Science Learning Tools. The learning tools are designed so that the four potentials that exist in students can be grown. These potentials are intellectual potential, emotional potential, spiritual potential, and creativity potential. In other words, this learning tool sfoster the entire human potential of students. This is in line with the statement of Learning-Theories.com (2016) that the humanist approach is an approach in education that can fulfill one's potential. This is also in line with the results of research by Lee, et al (2016) that says that the medical students who are trained with a humanistic approach made the students able to serve patients well. It can be understood that if for example the teacher applies a humanistic learning tool, he will automatically serve or teach the students as well as possible.

The application of humanist science learning tools is one way that teachers can take to foster good norms in relation with science. This is in line with the statement of Pawlucki (2008) which says that the truth about goodness in sports can be obtained through humanistic sports learning. So, the truth about goodness in Science can of course also be obtained through humanistic learning of Science. Qadry, et al (2021) said that the application of the concept of humanistic thinking in mathematics differentiation learning makes all students learn in different ways and according to their level of difficulty in understanding each mathematical concept so that they enjoy in mathematics learning. This case can happen also in

science learning. P. Alifah (2018) said that the collaborative methods of multicultural-based education and humanism theory when classroom learning was more effective for improving social sensitivity for elementary school students. Arcilla, René V (2014) said that humanist learning was very important for all of our education. L Zucca Scott (2010) said that education without true appreciation for the uniqueness of each and every individual (*humanist paradigm*) was an empty endeavor. Furthermore, he said that an important lesson can be learned from classical tradition of humanism. S. Tamrat (2020) said that humanism in education was an essential tool that would clean the academic environment from the entrenched overall moral and intellectual decay permeating. M.Odari (2020) said that integrating humanism in the education system could serve as a tool to nurture individuals who will not only improve their quality of life but also contribute positively to promote a more just and prosperous world.

2. RESEARCH METHOD

This research was a qualitative research. Qualitative research was a research that aimed to comprehend the reality of an object or phenomenon, namely by seeing the world from what it was, not the world it should be, so a person who conducted qualitative research must be an open-minded person. Qualitative research could be said also as a research whose conclusions were not obtained through statistical procedures. The qualitative type was used in this research was a descriptive which aimed to describe the advantages of humanistic Science learning tools. The subjects of this research were the students of Junior High School in Makassar City count to 60 people. Data collection techniques used were interviews and questionnaires. Interviews were conducted on the subject three times in different moment. Likewise, the questionnaire was given to the subjects three times at different moment, too. The data obtained were analyzed using the Miles and Huberman data analysis technique consisted of data reduction, data display, and conclusions drawing (1984).

3. RESULTS AND DISCUSSION

3.1 Results

In this research, it was found the advantages of humanistic science learning tools, which include (1) teaching materials, (2) learning scenarios, (3) lesson plans, (4) student worksheets, and (5) instrument to make an evaluation. The advantages of these Humanistic Science learning tools were found, namely:

- 1) Making teachers easier and easier in teaching the Science
- 2) Motivating the teachers to teach Science.
- 3) Making teachers more aware of the importance of developing students' emotional, spiritual, and creativity potential in science learning.
- 4) Making students felt happy in Science Learning
- 5) Making students easier and easier to understand the Science material
- 6) Motivating the students to study Science
- 7) Making the students more aware of the importance of emotional, spiritual, and creativity potential to be grown in learning science and
- 8) Opening the students' horizons to develop their emotional, spiritual, and creative potential in their daily lives independently.

3.2 Discussion

Humanistic science learning tools could facilitate and motivate teachers in teaching science to the students, making teachers more aware of the importance of developing students' emotional, spiritual, and creativity potential in learning science, making the students felt happy about Science Learning, making it easier for students to understand Science, motivating the students to learn Science, making the students more aware of the importance of emotional, spiritual, and creativity potentials grown in science learning and opened the students' horizons to develop their emotional, spiritual and creative potential in their daily life independently. This was in line with the view of Y. Javadi & M. Tahmasbi (2020) who said that through humanistic language textbooks, teachers could personalize the learning materials for be better, develop personality, and facilitate language acquisition. Furthermore, Y. Javadi & M. Tahmasbi also said that humanizing language teaching materials helped the teachers in designing learning activities related to the lives and experiences of the students and trying to engage students effectively in an atmosphere full of joy or fun. The above results were in line also with the statement of J. Frias (2019) which said that the learning strategies that involve humanity could motivate the students to have a positive attitude towards their learning environment, while creating a sense of responsibility, awareness, and creating a learning environment. its safe and relaxing.

4. CONCLUSION

The advantages of humanistic Science learning tools that author found in this research were:

- (1) Making teachers easier and easier in teaching the Science, (2) Motivating the teachers to teach Science, (3) Making teachers more aware of the importance of developing students' emotional, spiritual, and creativity potential in science learning, (4) Making students felt happy in Science Learning, (5) Making students easier and easier to understand the Science material, (6) Motivating the students to study Science, (7) Making the students more aware of the importance of

emotional, spiritual, and creativity potential to be grown in learning science and, (8) Opening the students' horizons to develop their emotional, spiritual, and creative potential in their daily lives independently.

AUTHOR'S CONTRIBUTIONS

The authors discussed the results and contributed to from the start to final manuscript.

CONFLICT OF INTEREST

There are no conflicts of interest declared by the authors.

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