

# Analysis of Humanist Education on VHS Mathematics Curriculum

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**Abstract.** The aim of VHS is to produce skilled workers. In doing so, the learning process is considered as perennial-behavioristic, which tends to be less humanistic. The orientation of humanist education treats students as human beings. Diversity, including student potential, critical, adaptive, and creative attitude, should be developed at VHS, especially in mathematics learning. An expectation is that VHS produce not only skilled graduates but also are critical, adaptive, and creative in creating new jobs. A large number of unemployed people is caused by less of humanist education in the VHS curriculum. Therefore, the purpose of this research was to reveal of humanist education and their consistency in VHS mathematics learning. The data sources are 37 MLP VHS of the 10th and 11th grade in Malang, Batu, and Bojonegoro and are collected using interview techniques. The results show that there are three humanist characteristics in VHS mathematics learning, which are active, critical, and creative attitudes. Humanist characteristics is not a priority and are only written in BC indicators and learning objectives. Therefore, humanist education was not developed thoroughly in the VHS mathematics curriculum.

**Keywords:** *humanist education, mathematics curriculum, VHS*

## INTRODUCTION

The main purpose of Vocational High School (VHS) is to prepare students to work [14], [22]. Thus, the development of a competency-based curriculum which combines professional knowledge with work skills is urgently needed [4], [8], [21], [24], [25]. In supporting that initiative, every lesson, including mathematics has to be integrated with the objectives. The concept of the VHS curriculum is an academic subject with perennial philosophy using behavioristic learning theory. The concept of the curriculum assumes that each student has the same potential, desire, ability, and capacity. Accordingly, each student is given the same material and treatment and then evaluated in the same way. The concept of the perennial curriculum tends to be not humanistic because it overrides the students' diversity, potential, critical, adaptive, and creative attitudes. Thus this humanist characteristic needs to be developed in VHS so that VHS produces not only skilled workers who can work but also can create new jobs.

The orientation of humanist education is treating human as human [9] by prioritizing affective development or student attitudes as part of the learning process. The aim is not only to transfer knowledge but also to prioritize the students' learning processes based on activeness and dynamics related to intelligence, integrity, and autonomy. The humanist curriculum focuses on student-centered activities [9]. Through constructive learning theory, students are able to actualize their potential according to their uniqueness. So, the concept of humanist education is empowerment and alignment, not coercion or restraint [9], [17].

Humanist education in VHS mathematics learning is to give students the freedom to learn actively and pleasantly and give freedom to be critical and creative so that they can develop their potential [17]. Therefore, the learning method is active learning by encouraging the students to investigate, formulate, prove or discover, and apply what has been learned [12]. The students not only learn and understand mathematics meaningfully but also actively become subjects to be critical, creative, and adaptive in the learning process. In this case, the teacher acts as a facilitator and motivator in optimizing the learning process. Learning can also be designed in a group discussion to solve problems given by the teacher. The aim is to make students interact, argue, be active and creative, and be able to adapt and find the best alternatives to solve the problem [15].

Lastly, humanist education can also be developed at VHS through active learning. In addition, a humanist characteristic must be written explicitly in Attitude Competencies (AC), Basic Competencies (BC), indicators, goals, learning models, and evaluations [2], [16], [19]. Therefore, the purpose of this study is to explore the existence of humanist education and analyze its consistency in VHS mathematics curriculum.

## METHOD

Consistency analysis is used to analyze the suitability between humanist attitudes in AC, BC, indicators, goals, model of learning, and evaluation [2], [16], [19]. For this reason, analysis of data are conducted in 37 Mathematics Learning Plans (MLP) VHS grades 10 and 11 in Malang, Batu, and Bojonegoro. To validate the data, triangulation interview is used [3], [11], [18], [20].

Consistency analysis uses a Likert Scale with four options: very unsuitable, unsuitable, suitable, and very suitable. The data from documents and interviews are analyzed qualitatively to describe the level of

consistency. To calculate and analyze the data, it is transformed into quantitative data with a combined weighing 1, 2, 3, and 4 [13]. After being transformed, rating scale using percentages is applied to classify them into four categories, which are very inconsistent, inconsistent, consistent, and very consistent [11], [13].

### RESULT

Based on the results of data analysis, the characteristics of humanist education developed in the MPL show three attitudes of active, critical, and creative. The percentage of these attitudes in a row is 56.8%; 18.9%; and 40.5%. The characteristics of humanist education, in fact, are only stated in BC indicators and learning objectives. Furthermore, humanist characteristics are not optimal due to MLP is made only based on competitive competence (CC), not integrated with affective competence (AC) [1]. However, humanist characteristics can still be developed through active learning models such as scientific approach, problem-based learning, and discovery with a percentage of 18.9%. The development of humanist characteristics in learning mathematics is very important and greatly influences the attitudes and behavior of students, especially in dealing with problems, including in solving mathematical problems.

In general, the development of humanist education in VHS MLP does not meet the consistency of the principles. In spite of the lack of humanist characteristics developed, there is also no correspondence between humanist characteristics stated in AC, BC, indicators, learning objectives, learning models, learning activities, and evaluations including instruments. This inconsistency is due to 1) humanist characteristics are not written and described in the AC to evaluation, 2) teachers have not understood the importance of humanist education, and 3) There is an assumption that mathematics learning is solely related to CC, not AC.

The purpose of humanist education is to develop students' attitudes and abilities as a whole, including respecting themselves and others, and developing critical, creative, adaptive, and moral values [5], [9], [17]. Humanist learning always focuses on the learning process and students as the subject of the learning [6]. Learning humanist mathematics is learning with the beauty and creativity of mathematics [7], [23]. This will motivate students to learn actively and pleasantly, so they have the freedom to grow and develop their creativity through open questions [5], [9], [15]. Through the priorities of learning experiences, interests, and abilities, students should understand the differences in results based on their meanings, so that emotional interactions and mental happiness occur in learning. Therefore,

humanist learning is learning that cannot be easily tested [10]. This is what must be the center of humanist curriculum development.

### CONCLUSION

Based on the result of the study, there are three humanist characteristics in VHS mathematics learning, namely active, critical, and creative attitudes. These humanist characteristics are not a priority and are only written in BC, indicators, and learning objectives. Therefore, humanist education was not developed thoroughly in the VHC mathematics curriculum.

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