



Implementation of character education in mathematics learning in elementary school

Aristanto¹, Nanda Dwi Rohmah²

¹Elementary School Teacher Education, STKIP Muhammadiyah Manokwari, Manokwari, Indonesia

²Elementary School Teacher Education, STKIP Muhammadiyah OKU Timur, OKU Timur, Indonesia

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ABSTRACT

The implementation of character education in elementary schools needs to be carried out on all sides on an ongoing basis. To develop character education in mathematics learning, it can be done by developing the content of mathematics lessons, selecting approaches, methods, or learning strategies to be used, as well as the mathematics learning process. This research is a qualitative research that uses a normative descriptive approach. Data collected by conducting interviews, observation and documentation. The results show that the implementation of education in mathematics can be realized based on the targets to be achieved by the researchers. Character education that is built through this learning is the values taught based on subjects such as discipline, independence, cooperation, and responsibility. In addition, learning activities that activate students through projects or problem solving will provide space for students to develop character values in learning mathematics. Integration is done by combining the character values in the lesson plans and students' consistency in applying these values outside of school. In measuring results, the teacher gives an assessment book to students.

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Corresponding Author:

Aristanto,
Elementary School Teacher Education,
STKIP Muhammadiyah Manokwari,
Jl. Trikora Arfai No 01, Manokwari, 98313, Indonesia,
Email: arispede@gmail.com

INTRODUCTION

National education functions to develop capabilities and shape the character and civilization of a dignified nation in the context of the intellectual life of the nation. In the State of Indonesia, the plan to improve social life has been explained in the preamble (UUD 1945), the fourth paragraph "regulates an education program that is formulated as a national education system. The purpose of national education is stated in Law Number 20 of 2003. Education in this regulation can be interpreted as an effort to build the nation's character. This character can become a national identity, so it cannot be followed by others. In this case, character education will have a major impact on students' attitudes in everyday life at school and in the community (Aminah et al., 2022; Fiolanisa et al., 2023).

Based on the functions and objectives of national education above, it is clear that education starting from Kindergarten (TK) to Higher Education must be carried out systematically and continuously to achieve these goals. This is related to the formation of the character of students so that they are able to compete, be ethical, moral, polite, and have character and can interact with the surrounding community (Yuhanis et al., 2020). The emergence of undisciplined behavior shows that the knowledge related to character education obtained by students at school does not have a positive impact on changes in students' daily behavior (Eli Meivawa et al., 2018). Basically, students know that their behavior is not right but they do not have the ability to get used to avoiding the wrong behavior. This is in the process of character education that occurs. It could be that character education that has been carried out so far has only been at the knowledge stage, has not yet reached the feelings and behavior of character (Wuryandani et al., 2016).

Educational institutions as a place for character building of students are required to increase the intensity and quality of their implementation (Supriyono et al., 2022). The demands are based on a growing social phenomenon, namely the increase in juvenile delinquency in the community and in the school environment such as students playing truancy, students not respecting teachers, brawls, beatings, theft, robbery.

and immoral acts. This phenomenon has worried parents, schools and the community. Therefore, educational institutions as an official forum for fostering the younger generation are expected to increase their role in shaping the character of students in addition to their families and communities. Suryadi, (2012: 96) explains that the main cause of moral and character crises among students is the occurrence of dichotomization, namely a strict separation between intellectual education on the one hand, so that character education can be the right solution to solve problems related to character education of students.

To prevent the moral crisis from getting worse in students, character education can be integrated into every subject, including mathematics (Septiwiharti & Mutawakkil, 2023). Mathematics learning is an integral part of the education system in schools and is given from basic education to secondary education, even in higher education. Character education can be implemented to build good habits and needs to be trained from the start. Education that students need to carry out such as religious education, nationalism, independence, integrity, mutual cooperation, responsibility, etc. Of course, it is not easy for elementary schools to spread values like that, so there needs to be cooperation from all stakeholders such as principals, teachers, parents, committees, communities, and stakeholders in the field of education.

According to (Ramli, 2003), Character Education is that which has the same essence and meaning as moral education and moral education. The goal is to shape the personality of students, so that they become good human beings, citizens and good citizens. Therefore, the essence of character education in the context of education in Indonesia is value education, namely noble values originating from the culture of the Indonesian nation itself. Mathematics learning is very interesting if it is associated with character education. This is because mathematics is a general science that uses the power of the mind to solve the problems at hand (Lestari et al., 2022; Pertiwi & Marsigit, 2017). Through this kind of learning process, students can find concepts, solve problems and apply character values in everyday life.

So that the learning objectives of character education can be achieved maximally by fulfilling cognitive, affective and psychomotor aspects, then in learning mathematics it does not only teach about knowledge and arithmetic skills, but must insert or integrate with character education in the learning so that it can achieve all three aspects as a whole and the problems mentioned above can be minimized or prevented early so that children are able to implement the characters that have been obtained in the learning in everyday life even into adulthood (Amalia & Hariyanti, 2022; Arafat, 2019).

Education in elementary schools is the first level of formal education that will determine the direction of developing the potential of students. Therefore, in elementary schools it is necessary to

develop the disciplined character of students optimally so that it is hoped that at the next level students will have a strong provision of disciplinary behavior. Teachers have a very important role in teaching the moral values and morals of students. In supporting character education, mathematics can be applied by integrating the subjects and characters in the topic. Given the importance of disciplinary character education in elementary schools, it is necessary to implement various school policies that can support the maximum success of disciplinary character education (Annisa, 2019).

The paradigm shift in the 2013 curriculum in elementary schools also made significant changes to the learning process (Beddu, 2019; Fitriyah & Wardani, 2022). Character education, which is used as the main pillar of learning in elementary schools, becomes a challenge as well as an opportunity for educators to build the character of students. Several problems that arise later are how to integrate values in character education into thematic learning and fields of study in elementary schools. This at the same time changes the view that learning only departs of the basic competencies in the curriculum and how to complete the material that appears in these basic competencies.

RESEARCH METHODOLOGY

The research approach used is included in the descriptive qualitative research. The term descriptive qualitative research is shown to describe a situation or phenomena as they are. Descriptive qualitative research is research that is intended to collect information and supporting data regarding existing status or symptoms, namely the condition of the symptoms as they were at the time the research was conducted (Sutama, 2019). The sample that the researcher took was 30 students and the research subjects were fourth grade students at SD Yapis 02 Manokwari. This qualitative approach can analyze student activities through the character education learning process so that it can be integrated into every subject, including mathematics at SD Yapis 02 Manokwari, West Papua.

Researchers conducted observations, interviews and documentation to collect data in the field. In making observations the researcher only assessed the subject (non-participant). The interview itself has been designed by the researcher such as preparing direct questions or using a questionnaire, as well as conducting study documentation in the field, so that the documents studied have a correlation with the research conducted by the researcher. In general, data analysis is carried out using an interactive model (Milles dan Huberman, 1992) which uses three steps such as data reduction, data presentation and verification.

RESULTS AND DISCUSSIONS

This research was conducted at SD Yapis 02 Manokwari, West Papua. In learning mathematics, learning does not only focus on providing concepts, procedures and practice questions. Learning can be related to the cultivation of character values, for example in the distribution material the value of justice can be instilled through story questions that describe a fair distribution to several children. In this study, the researcher found several problems and strategies in implementing the learning character education in schools, such as lack of coordination between teachers and principals regarding the implementation of character education in mathematics. The development of character values in students so that these values are embedded in themselves, appear in everyday life, as citizens, who are religious, love the homeland, are productive, and creative as well as provide a general picture of the integration of values. character education in learning mathematics in elementary schools such as discipline, independence, teamwork, and responsibility (Bilda, 2016).

Character education can also be provided in the cultural development carried out in schools. Activities such as praying before and after learning, lining up before entering class, community service or picket, will develop religious, disciplined, and caring characters. (Sumarmo et al., 2011)

revealed that the complexity in learning mathematics needs to be seen from two perspectives. First, the teacher's pedagogical ability is viewed from the topics being taught, the characteristics of the students, the learning environment, and the characteristics of the topics being taught. Second, lesson planning that involves apperception, delivery of the topics taught, responses to student questions, evaluation of math assignments, and a balance between the objectives and the evaluation given. From these two perspectives, the characteristics of mathematics learning need to be seen as a learning that requires special attention to the topics being taught and specifically needs to be taught by paying attention to the characteristics of students and the learning environment.

Planting character education in mathematics learning in elementary school is an absolute thing to do (Annisa, 2019; Fathinnaufal & Hidayati, 2020; Khamidah, 2018; Wuryandani et al., 2016). The integration of character values in learning mathematics in elementary schools in particular can be described in the cultivation of several values in a learning activity as follows. First: Religious, Tolerance, Democratic, Peace-loving and Appreciating Achievement: obeying religious teachings (can be by cultivating prayer before and after learning), respecting differences in religion, ethnicity, opinions, and different attitudes of students so as to create an atmosphere peace (can be inserted in math story problems that illustrate these differences, also through cooperative learning that provides space for students to exchange opinions), also appreciate the achievements of friends through the appreciation given by the teacher together with other students in the class (can be by giving applause to friends who have presented their answers in front of the class).

Second: Honest and Independent: forming a trustworthy person (can be shown by the habit of completing evaluations independently / not cheating). Third: Discipline, Responsibility and Hard Work: obeying the rules, and making a serious effort in completing the task (can be by giving a project or problem solving for students related to their environment, for example in buying and selling learning, students are invited to directly shopping at the market by walking together so that students can apply traffic order, be responsible with the money they bring, and be able to complete the given project as well as possible). Fourth: Curiosity, Creative and Communicative: an attitude of always being curious and wanting to produce something new from what they already have and showing collaboration with other students (this attitude can be raised through an observation activity followed by worksheets that facilitate students to find new things, for example by folding paper in the form of various polygons, students can make findings about the elements and folding symmetries of these shapes and can present the results both in groups and in front of the class). Fifth: National Spirit and Love for the Homeland: attitudes that show insight and concern for the nation (can be realized through the delivery of culture in the delivery of topics in mathematics, such as learning geometry using traditional house media in Indonesia); and Sixth: Love to Read, Care for the Environment and Care for Social: the attitude of getting used to reading, preventing environmental damage, providing assistance to others (the combination of these three values can be realized in the provision of libraries in Indonesia). class, so that it can add insight to students and increase awareness of the environment and social environment. Mathematics learning can be realized through problem-based learning that involves students in an effort to prevent or repair environmental damage)

CONCLUSION

The results of this research show that the main findings from the implementation of character education in mathematics learning in elementary schools before testing students' character in mathematics learning related to discipline, independence, and very low cooperation. After being implemented by the teacher regarding student character in mathematics learning, the student's character values can be implemented well. Character education that is built through this learning is the values taught based on subjects such as discipline, independence, cooperation and responsibility. In addition, learning activities that activate students through projects or problem

solving will provide space for students to develop character values in learning mathematics. The planning and implementation of learning is directed at cultivating character values related to the topics being taught. In this case, the management and creativity of educators are needed to realize the inculcation of student character values. This of course must be supported by all stakeholders such as school principals, teachers, parents, community and other stakeholders.

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