

Analysis of the implementation of character education in students as prospective teacher

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Abstract: The aim of this research is to determine the implementation of character education in students as future teachers. Character education can form a complete human being with character, namely forming lifelong learners, and will actually be able to develop all students' potential in a balanced way (spiritual, emotional, intellectual, social and physical) which is adapted to the educational goals contained in the philosophy of the Indonesian nation, namely Pancasila. In a college environment, character education is nothing new. However, its implementation still requires more understanding which can be provided in general courses at universities. This research uses data collection methods, namely interview methods, observation and documentation methods. Validity test using source triangulation and 5-stage qualitative analysis from Miles and Huberman. From the research results, it was found that the implementation of character education in Flores University mathematics education study program students as teacher candidates through curriculum review courses can be seen from the embedded character values, namely discipline, hard work, creativity, independent responsibility and communicativeness.

Keywords: Character education, character values, prospective teachers

Abstrak: Tujuan dari penelitian ini adalah untuk mengetahui implementasi pendidikan karakter pada mahasiswa sebagai seorang calon guru di kemudian hari. Pendidikan karakter dapat membentuk manusia secara utuh yang berkarakter yaitu membentuk pembelajar sepanjang hayat, juga sejatinya akan mampu mengembangkan semua potensi peserta didik secara seimbang (spiritual, emosional, intelektual, sosial, dan jasmani) yang disesuaikan dengan tujuan pendidikan yang termuat dalam falsafah bangsa Indonesia yaitu Pancasila. Dalam lingkungan perguruan tinggi, Pendidikan karakter bukanlah hal yang baru. Namun implementasinya masih membutuhkan pemahaman lebih yang dapat diberikan pada mata kuliah-mata kuliah umum di perguruan tinggi. Penelitian ini menggunakan metode pengumpulan data yaitu metode wawancara, metode observasi dan dokumentasi. Uji keabsahan dengan menggunakan triangulasi sumber dan analisis kualitatif 5 tahapan dari Miles dan Huberman. Dari hasil penelitian diperoleh implementasi pendidikan karakter pada mahasiswa program studi pendidikan matematika universitas Flores sebagai calon guru melalui mata kuliah telaah kurikulum, dapat terlihat dari nilai karakter yang tertanam yaitu disiplin, kerja keras, kreatif, mandiri tanggung jawab dan komunikatif.

Kata kunci: Pendidikan karakter, nilai-nilai karakter, calon guru

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INTRODUCTION

Character education is now essential not only in the school but also in the home and social environments. It is not only intended for early childhood to teenagers but also for adults because character education is the key to the success of each individual (Yusuf & Kuswandi, 2023). Character education is an understanding of character values, which include knowledge, awareness or will, and actions to implement these values, both towards God Almighty, oneself, others, and the environment. Character development can be carried out by developing a person's character. Cultural and character development can be carried out in an educational process that does not separate students from the social environment,

community culture, and national culture, all of which are contained in the values of Pancasila (Afriani et al., 2022; Fitriyani et al., 2020). Cultural and character education is develop Pancasila values in students through heart, brain and physical education (Prihantini & Khoirunnisa, 2023).

The aim of the national development of the Indonesian nation is to create an Indonesian society with noble, moral, ethical, cultured and civilized Indonesian society based on the philosophy contained in Pancasila (Ma'arif et al., 2020; Warlim et al., 2023). One of the efforts made by the Indonesian government to realize national goals is to strengthen national identity and character in the world of education, namely forming and developing students who are devoted to God Almighty, obey legal rules, maintain internal and inter-religious harmony, implement intercultural interaction, developing social capital, applying the noble values of the nation's culture, and having pride as the Indonesian nation to strengthen the spiritual, moral and ethical foundations of nation building. Almost all levels of education have implemented character education. At the primary and secondary levels, various educational institutions offer character education as a prime program, but in general, it can be seen that some Indonesian people still have not developed noble morals that have a positive impact (Wahono, 2018; Nurpratiwi, 2021; Yunanto and Kasanova, 2023). This can be seen in the news broadcast by the mass media, namely ongoing corruption, abuse of power and violence, rampant drugs in the educational environment, bullying, acts of pornography, brawls between schools which indicate changes in morals, morals and character.

With many educational challenges influenced by the worrying situation and character of the nation, in 2010 the government through the Ministry of National Education launched the National Policy for National Character Development for 2010-2025, so that education is required to be able to become an agent of change that is able to change the character of the nation through its participants (Akin et al., 2017; Hamsiah et al, 2022). The educational process in formal institutions really requires the role of educators or teachers. As one of the tertiary institutions, Flores University, through the Faculty of Teacher Training and Education, specifically in the Mathematics Education Study Program, is required to be able to guide its students to become good educators or teachers. Have competence in accordance with the professionalism of a teacher as stated in the Law of the Republic of Indonesia No. 14 of 2005 includes personality, pedagogical, social and professional competencies so that they can carry out their duties well to form students' personalities with 'Pancasila' character.

Apart from that, it also educates students so that they can become prospective teachers who are not only required to always improve their knowledge and abilities to carry out their professional duties. But also as prospective teachers, they must be sensitive to the changes that occur, especially in the fields of education and teaching, and in society in general (Mirzagitova and Akhmetov, 2015; Rowan et al, 2021; Bahodirovich and Romilovich, 2021). This is in line with what was stated by Saefudin (2012). In May 2010, coinciding with the commemoration of National Education Day, there was a reaffirmation of character education in the education system in the country with the theme "Character Education to Build National Civilization". One of the important meanings of this theme is that character development and character education are a necessity. Education not only leads students to become intelligent but also to have noble and noble character so that their

existence as members of society becomes meaningful. Students are expected to have noble character and be able to develop all their potential. They have increasing abilities both in terms of attitudes (affective) (Silahooy et al., 2024), knowledge (cognitive) (Nasir et al., 2024; Rubini et al., 2018), and skills (psychomotor) (Mandasari et al., 2021). These three basic abilities are very necessary for students in social and national life and contribute to the welfare of human life.

Teachers at each era will have different challenges from teachers today because the generation they face is a new generation that has different characteristics according to developments over time (Gui et al., 2020; Heriansyah, 2018; Nasir et al., 2023). So as future teacher candidates you need to have role models that will serve as guidelines for future generations of the nation. To produce teachers who are truly ready to be at the forefront of forming a generation of the nation with noble character, the teacher education process in higher education needs to be carried out seriously and maturely (Kim et al., 2019; Rohana et al., 2015). The Mathematics Curriculum Review course is one of the courses that equips prospective teachers to become quality teachers in the future. Through this course, the introduction of teachers is not limited to the profession as a teacher who has the task of teaching students in the classroom or providing the transfer of knowledge and values to students. However, this course makes you aware of the responsibilities you will carry when you become a teacher in the future.

The responsibility of a teacher is to guide students who are the nation's next generation to achieve the expected goals. So the aim of this research is to look at the implementation of character education for prospective teachers who not only memorize various knowledge and theories, but must provide examples of behavior that become role models for their students as well as for the environment around them. A prospective teacher from the start must understand and implement character education in the educational process. Therefore, the mathematics curriculum review course provides students with the key for future teacher candidates to be able to appreciate and carry out their duties and responsibilities well so that they can become teachers who are emulated by students and the environment around them. Mathematics curriculum review lectures are very relevant if they are integrated with the character education process as an effort to implement character values for future teacher candidates.

METHOD

The type of research carried out was qualitative research carried out at the Mathematics Education Study Program, FKIP, University of Flores, with research subjects being students who programmed mathematics curriculum study courses. Meanwhile, the object of this research is students' understanding of character values and implementation in developing character values in students as prospective teachers in mathematics curriculum study courses. The research instrument used was a questionnaire to obtain data on students' perceptions or understanding of character values in general and character values that are linked to the learning process of the mathematics curriculum review course and observations were used to obtain data on the implementation of the development of student character values in the implementation of the course. study of the mathematics curriculum at the Flores University mathematics education study program. The data analysis technique uses the Miles

and Huberman qualitative technique which includes the stages of data collection, data reduction, data presentation, and drawing conclusions and verification.

RESULTS AND DISCUSSION

Student understanding of character values and mathematics learning

The questionnaire research instrument was given at the beginning of lecture activities to obtain data about students' understanding of character values in general, which will be implemented in the mathematics learning process specifically for students in the mathematics education study program at the University of Flores who program mathematics curriculum study courses. Based on the results of questionnaire analysis and interviews, the following results were obtained:

Table 1. Results of the questionnaire for understanding character values

Aspect	Indicator	%
Students' Understanding of Character Values in Mathematics Learning	Understanding Character and the Role of Character Education	85
	Factors influencing character education	70
	Attitudes that contain character	90
	Various character values	60
Students' Understanding of Mastering Character Values in the Mathematics Learning Process	Understanding the Implementation of Character Values	75
	Character Values Development Process	45
	Integration of Character Values in Mathematics Learning	40

Based on the questionnaire results from Table 1, it can be seen:

1. 85% of students show that they understand character values and the role of character education in mathematics learning. The character values that students understand are positive values that can be reflected in students' life attitudes or behavior in socializing in society.
2. B. 70% of students stated that they understood the factors that influence character education: family, school, and community.
3. 90% of students understand the attitudes that contain character values in the mathematics learning process, including not cheating when completing the course assignments given, obeying the rules that apply in lectures that have been mutually agreed upon, being polite in speaking both with the lecturer and with peers in the lecture room. Students in the family and community environment also demonstrate character values.

4. 60% of students do not properly and correctly understand various character values in terms of categorizing various character values, including students being able to develop an independent attitude in everyday life, both in the lecture process and in life in society.
5. 75% of students can understand the implementation of character values in the mathematics learning process in the mathematics curriculum review course, where cooperation can be established between students and lecturers, and there is great hope that the implementation of character values can be applied to all courses.
6. 45% of students have not been able to develop character values in general; according to students' understanding, character values will only appear in religious and civic education courses. In contrast, value development character will be difficult to apply in mathematics courses that apply exact science. However, the development of character values in the mathematics learning process can be seen in the problem-solving process or what is better known as problem-solving, an example of character values that appear to be creative students finding solutions or resolving problems.
7. 40% of students do not understand properly and correctly the integration of character values in mathematics learning, which can be reflected in the discussion process or group presentations in the mathematics learning process.

Based on the results of research from the questionnaire analysis described above regarding student understanding regarding the character values contained in mathematics learning, which are studied in the mathematics curriculum review course, can be initial capital for students as prospective teachers to have a good understanding so that they can be implemented in learning mathematics and obtain maximum results, this is in line with research results from Ojose (2011: 91) which states "*mathematics is so entwined with today's way of life that we cannot fully comprehend the information that surrounds us without a basic understanding of mathematical ideas.*" Suppose students know character values and the mathematics learning process in the end. In that case, the students will respond and provide perceptions well and correctly by implementing character values in actual mathematics learning.

Observation results of the implementation of character values in the mathematics learning process

Observations on the implementation of character values were carried out in the learning process at the end of the semester for Flores University students who were programming the mathematics curriculum review course, to see indicators of achieving implementation goals based on learning activities that had been followed during 1 semester. Observation analysis shows that students who program the mathematics curriculum study course at the University of Flores are able to understand and carry out the implementation of character values in lectures, all of which require collaboration between students and lecturers. The results of the implementation observation analysis can be seen in the Table 2.

Table 2. Results of observation analysis of the implementation of character values in the lecture process study of the mathematics curriculum

Character	%	Mean (%)
Discipline		
a. Become a person who can comply with the study contract agreed upon at the start of the study.	100	
b. Participate in maintaining the cleanliness of the lecture room before and after lectures.	85	82.5
c. Complete coursework on time	75	
d. Demonstrate orderly behavior and comply with agreed lecture rules	70	
Hard Work		
a. Able to solve and overcome problems in the context of mathematics curriculum review lectures	90	
b. Don't complain or give up on completing assignments for studying the mathematics curriculum	85	87.5
c. Able to find solutions to problems found in mathematics curriculum review courses.	80	
d. Able to discuss with friends and lecturers when they encounter difficulties in the lecture process.	95	
Creative		
a. Able to provide opinions and find alternative solutions to problems found during the lecture process	60	
b. Find more than one solution to problems found during the lecture process.	70	62.5
c. Able to convey and explain alternative solutions to problems found in front of the room without being appointed first by the lecturer	50	
d. Able to convey and explain alternative solutions to problems found in front of the room without being appointed first by the lecturer	70	
Independent		
a. Be independent of friends or other people.	80	
b. Confident in being able to complete college assignments well.	90	
c. Able to complete questions and coursework individually.	80	
d. Know subjects and study the curriculum correctly to find the best solution for obstacles or problems.	85	81.00
e. Able to find out the material that will be studied and what has been studied in mathematics curriculum review courses.	70	
Responsibility		
a. Demonstrate attitudes and behavior as a student during the lecture process.	95	
b. Strive to complete course assignments seriously so that the results and deadlines for submitting assignments can be achieved by mutual agreement.	100	98.33

c. Seriously participate in the discussion process with group members during lectures.	100	
Communicative		
a. Use polite and respectful language during the lecture process.	85	
b. Able to convey ideas and responses using language that friends and lecturers easily understand during lectures.	90	
c. Helping friends when someone finds it difficult to understand the lecture material given by the lecturer	95	92.50
d. Refrain from getting angry or interrupting friends when someone has a different opinion during lectures or group discussions.	100	

Table 2 shows that on the discipline indicator, students got a mean total score of 82.5%, the hard work indicator got a score of 87.5%, the creative indicator got a score of 62.5%, the independent indicator got a score of 81%, the responsibility indicator students got a score of 98.3%, and communicative students got a score of 92.%. From the results of the analysis, it was found that the implementation of character values in students of the Mathematics Education Study Program, Faculty of Teacher Training and Education, University of Flores can be perceived well as shown by the increasing development of character values during lectures in the Mathematics Curriculum study course. It can be seen from the students' seriousness in obeying the rules mutually agreed upon at the start of the lecture. Character values such as hard work, independence, discipline, responsibility, and communicativeness are closely related to social values. These, namely attitudinal values, regulate relationships between individuals and the relationship between individuals and their environment.

The implementation of character values in the mathematics learning process is needed by students as prospective teachers, and the results of implementation can be seen during the lecture process in changes in attitudes towards the better, such as discipline towards the learning contract that has been mutually agreed upon. Illustrations of the atmosphere of mathematics learning in developing disciplinary character values are also practiced through habituation (Widodo, 2017; Pertiwi and Marsigit, 2017; Hendriana, et al., 2018; Asdarina and Arwinda, 2020). However, from the research results, it can be seen that the development of creative character values in mathematics lectures is still not optimal, namely only reaching 62.5%, which is the lowest creative percentage among the development of other character values. It can be seen from the results of observations during lectures that creative values in mathematics are closely related to each student's cognitive abilities or thinking skills when solving mathematical problems. Creative students can also relate to and solve problems, including mathematics problems, other subjects, or problems related to real life (Wardono and Kurniasih, 2015; Dores and Setiawan, 2019; Sulistiawati et al., 2021)

Referring to the research results, the solutions to the answers produced by students already have truth value but there are still several problems that are assisted by lecturers and only a few students are able to provide alternative solutions correctly. The ability to think creatively in solving problems is seen from the aspects of fluency, flexibility and novelty, namely the ability to solve problems by giving various and correct answers (Saefudin, 2012; Ulandari et al, 2019; Siregar et al, 2020). From several creative indicators,

a percentage of 50% was obtained, seen from the small number of students who were able to convey and provide alternative solutions to problems found in front of the class without first being appointed by the lecturer. Followed by a percentage of 60% which shows that many students have not been able to provide opinions and find solutions to problems encountered during the lecture process.

Students are said to be creative if they can investigate mathematical ideas, try to find various ways of solving problems, encourage the development of mathematical abilities, think collaboratively, and explain the relationship between concepts (Arifin, 2018; Atika et al., 2019; Warisno, 2022). Meanwhile, based on the percentage of research results, when taken as a whole, the students of the Flores University mathematics education study program as a whole have not been creative in the learning process in mathematics curriculum study courses. It means developing creative character, especially in solving mathematical problem-solving problems that require frequent and continuous practice.

The process of developing character values takes a relatively long time, and this is an evaluation that requires follow-up and habituation. The development of character education is integrated into the learning process because a person must be capable of character when viewed from a scientific perspective and in practice in everyday life (Darma et al., 2018; Jela et al., 2022). So, the strategy for integrating character education is a step in implementing character education through routine, spontaneous, exemplary, and conditioning activities. So that students not only know theoretically about character values but can also implement character values directly in lectures, which ultimately leads to becoming prospective teachers of mathematics and the daily environment. Apart from that, students are expected to be aware of their roles and responsibilities as academics who are required to integrate positive character values in all aspects of life, especially as prospective mathematics teachers.

CONCLUSION

Based on the results of research and discussion of the results of research on the implementation of character education for students as prospective teachers through mathematics curriculum review courses, the conclusion is:

1. Students' perceptions about the value of character in the mathematics learning process that students can obtain as prospective teachers in mathematics curriculum review courses are included in the good category. However, the ability to give opinions and find alternative solutions to problems found in Mathematics curriculum review lectures only achieved 60%. It is also the cause of students' low ability to convey and present alternative solutions found in front of the lecture room without being asked first by the lecturer. Students stated that they could not properly understand the approaches and methods used by lecturers regarding implementing character values in the mathematics learning process through mathematics curriculum review courses.
2. The research results show that students experience character changes marked by the habituation of positive values such as hard work, creativity, independence, discipline, responsibility, and communicativeness. These are the basis for understanding character for prospective teacher students in the mathematics curriculum review course. It can be seen from the percentage of positive values obtained from the research results.

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