CULTURE OF INDEPENDENT CHARACTER IN POST PANDEMIC MATHEMATICS LEARNING ACTIVITIES ON ELEMENTARY SCHOOL



Compiled as One of the Requirements for Completing an Undergraduate Study Program in the Masters Department of Basic Education, Faculty of Postgraduates

By:

CAHYANING FITRIA PRIHUTAMI Q200200034

MASTER STUDY PROGRAM OF BASIC EDUCATION POSTGRADUATE FACULTY UNIVERSITAS MUHAMMADIYAH SURAKARTA

2022

APPROVAL

CULTURE OF INDEPENDENT CHARACTER IN POST PANDEMIC MATHEMATICS LEARNING ACTIVITIES ON ELEMENTARY SCHOOL

PUBLICATION ARTICLE

by:

CAHYANING FITRIA PRIHUTAMI

Q200200034

Approved to be examined by consultant:

Supervisor I

Supervisor II

Dr. Yulia Maftuhah Hidayati, S.Pd., M.Pd NIDN. 0619078501

Prof. Dr. Budi Murtivasi, M.Kom NIDN, 0022076101

ACCEPTANCE

CULTURE OF INDEPENDENT CHARACTER IN POST PANDEMIC MATHEMATICS LEARNING ACTIVITIES ON ELEMENTARY SCHOOL

by:

CAHYANING FITRIA PRIHUTAMI

Q200200034

Accepted by Board Examiner of Basic Education Faculty of Post Graduate Muhammadiyah University of Surakarta On Wednesday, 2 Auguts 2022

The board Examiners:

- 1. Prof. Dr. Budi Murtiyasa, M. Kom (Head of Exaimer)
- 2. Dr. Yulia Maftuhah Hidayati, S. Pd., M. Pd M. Hum (Member I of Examiner)
- 3. Dr. Djalal Fuadi, M. M

(Member II of Examiner)

) í (

Direktur Pascasarjana, M.Farid Wajdi, S.E. M.M., Ph.D. KANIDN. 0605056501

TESTIMONY

I testify that in this <u>publication article</u> there is no plagiarism of previous literary works which been raised to obtain bachelor degree of certain university, nor there are opinions or masterpieces which have been written or published by others, except those in which the writing is referred to the manuscript and mentioned in literary review and bibliography.

Hence later, if it is proven that there are some untrue statements in this testimony, I will fully be responsible.

> Surakarta, 2 August 2022 The Researcher

CAHYANING FITRIA PRIHUTAMI Q200200034

CULTURE OF INDEPENDENT CHARACTER IN POST PANDEMIC MATHEMATICS LEARNING ACTIVITIES ON ELEMENTARY SCHOOL Abstrak

Pendidikan karakter merupakan bagian dari proses Pendidikan. Pandemi Covid mewajibkan siswa belajar dari rumah mengakibatkan pembudayaan karakter mandiri terabaikan sehingga mengalami kendala saat pertemuan pasca pandemi. Penelitian ini bertujuan mendeskripsikan pembudayaan karakter mandiri dalam kegiatan pembelajaran Matematika pada pertemuan pasca pandemi di SD Negeri 1 Kedungombo, Baturetno. Penelitian ini menggunakan pendekatan deskriptif kualitatif. Data diambil dari Kepala Sekolah, Guru dan Siswa. Teknik pengumpulan data melalui dokumentasi, wawancara dan observasi. Teknik analisis data melalui reduksi, display, kesimpulan dan verivikasi. Uji validitas menggunakan triangulasi sumber dan teknik. Hasil penelitian menunjukkan kegiatan guru membudayakan karakter mandiri pada pembelajaran matematika pertemuan pasca pandemi melalui Kegiatan awal saat apersepsi, kegiatan inti dengan 1) Menggunakan metode sesuai materi, 2) Membiasakan siswa terlibat proses pembelajaran, 3) Membiasakan siswa mandiri menyelesaikan permasalahan serta penutup dengan memberikan motivasi menumbuhkan kemandirian. Simpulan penelitian adalah pembudayaan karakter mandiri telah dilakukan pada kegiatan awal, inti dan penutup pada pembelajaran matematika pasca pandemi.

Kata Kunci: Karakter mandiri, pembelajaran matematika, pasca pandemi

Abstract

Character education is part of the education process. The Covid pandemic requires students to study from home resulting in neglecting the cultivation of independent characters so that they experience obstacles during post-pandemic meetings. This study aims to describecivilizing independent character in Mathematics learning activities at the post-pandemic meeting at SD Negeri 1 Kedungombo, Baturetno. This research use desciptive qualitative approach. Data were taken from the Principal, Teachers and Students. Data collection techniques through documentation, interviews and observations. Data analysis techniques through reduction, display, conclusion and verification. Validity test using triangulation of sources and techniques. The results of the study show that teacher activities cultivate independent characters in post-pandemic mathematics learning meetings through initial activities during apperception, core activities by 1) Using methods according to the material, 2) Getting students used to being involved in the learning process, 3) Familiarizing students independently in solving problems and closing by providing motivation foster independence.

Keywords: Independent character, learning mathematics, post-pandemic

1. INTRODUCTION

Cultivating character education cannot be carried out in distance learning as a result of the covid pandemic. One of the obstacles faced by students in using technology in the distance learning process is character education(Suriadi et al., 2021). Mainstream character education is an integral part of education, especially basic education. Elementary school students really need character education for their development needs. Preparing a good generation is the same as instilling prosperity for the future(Akhwani, 2021). Children who are now growing and

developing are a reflection of the future, meaning that character education for elementary school students is absolutely given. Character education, especially independence, must be formed as a basis for taking education at the next level.

Independence in character education is a process involving normative elements which means that independence is a directed process because the development of independence is in line with the nature of human extension, so the direction of development must be in line with the basic goals of human life.(Dwi Rita Nova & Widiastuti, 2019). In this case, the independence that is formed in students during the online learning period is almost invisible, especially in solving math problems. Students tend to depend on others in solving the mathematical problems they get.

Mathematics learning is the process of providing learning experiences to students through a series of planned activities so that students gain competence about the mathematical material being studied(Gatoto, 2007). Mathematics learning can be described as an activity carried out by teachers to create classroom situations so that students learn by using their minds and thoughts to find the truth of mathematical materials independently. The application of student independence in learning mathematics is very less when students study online/remotely.

Distance learning has stopped since the Ministry of Education and Culture instructed in SE Number 4 of 2021 on September 13, 2021 regarding the Implementation of Face-to-face Meetings for the Academic Year 2021/2022. Education Units are allowed to hold limited faceto-face learning activities. Through established regulations, students carry out learning in schools with the Limited Face-to-face Learning (PTMT) model using a strict Health protocol. PTMT rules limit offline learning. Not every day all students get offline learning facilities. The number of study hours is also limited to only 4 x 30 minutes. Such conditions make students must be ready to independently carry out learning at school and be able to complete school assignments without the help of other people or internet media.

The implementation of PTMT mathematics learning after the pandemic that occurred at SD Negeri 1 Kedungombo, Baturetno District, has integrated independent character education. This step was taken as an anticipation of the lack of student independence when participating in math learning activities for the first time after the pandemic. Through interviews with teachers at SDN 1 Kedungombo, Baturetno Subdistrict, it was shown that the civilizing of students' independent character was minimal at the beginning of the PTMT implementation, mostly showing the character of students' independence which was very lacking in completing the tasks given by the teacher. Students have not been able to think responsively to find solutions to the problems expressed by the teacher.

The problem of the low level of student independence in learning mathematics after students carry out PTMT learning after the COVID-19 pandemic must be addressed immediately. Various efforts have been made by schools to improve the independent character of learning that was lost when learning mathematics was carried out online/PJJ. Principals and teachers work together to program efforts to overcome these obstacles. The re-cultivation of students' independence, in the process of learning mathematics is the main goal. Through the limitations of the PTMT rules which require that the number of student study hours is only 4 hours of lessons in one day, teachers develop appropriate strategies to deal with these obstacles. Approach,

Many researches on the integration of the application of independent character education have been carried out, including by Husna whodeclarethat independent character education can be seen from the aspect of self-development, integration in subjects, and school culture. Aspects of integration in subjects, integration of independent character values in lesson planning, subjects, and cooperative, problem-based and contextual learning strategies(Husna, 2017). Furthermore, Suyitno, et al carried out qualitative research with the aim of getting input on how elementary school teachers in Japan integrate character values in learning, especially in mathematics.(Suyitno et al., 2019). The third study by Hidayat, et al discusses the learning independence of students in online learning during the covid 19 pandemic. In this study it was revealed that learning independence is important for students, especially when learning is carried out online.(Hidayat et al., 2020). The fourth research suggests that student learning independence can improve student achievement. The activities carried out are planning, determining, and evaluating learning both during practical and theoretical learning(Siagian et al., 2020). Furthermore, Novantri's research which shows the success of student learning is shown through the teacher's learning model and students' independent learning skills(Novantri et al., 2020). The learning methods and models used affect the formation of student independence so that they can improve student learning outcomes. Further research by Cahyani which describes the crisis of students' independent character formation so that there is a need for improvement in thematic learning in elementary schools(Cahyani et al., 2020).

The description of the exposure of the research that has been carried out, it can be seen that the research focuses a lot on the overall implementation in the learning process. The research that has been carried out took place when students were still experiencing the online learning period. However, there has been no research that specifically discusses independent learning in mathematics learning in limited face-to-face meetings after online learning. Thus, researchers will conduct research on civilizing independent characters in mathematics learning after the COVID-19 pandemic.

Based on this background, this study aims to describe the implementation of civilizing independent characters in post-pandemic Mathematics learning at SD Negeri 1 Kedungombo, Baturetno District. The research was reviewed from the learning activities carried out by the teacher during the mathematics learning process.

2. METHOD

This study uses a qualitative approach with a qualitative descriptive method. This study seeks to describe, describe and explain the implementation of civilizing independent character education in mathematics learning activities during the post-covid-19 learning period from January to March 2022. The research location is at SD Negeri 1 Kedungombo, Baturetno District, Wonogiri Regency. At this time there was a transitional problem of change from students who previously carried out online mathematics learning from home / PJJ switching to limited face-to-face learning directly at school in terms of independence in learning.

The object of research is the cultivation of independent characters possessed by students during post-pandemic mathematics learning activities seen in initial activities, core activities and final learning activities. The research subject is the class teacher. Qualitative data sourced from the principal, teachers and students at SD Negeri 1 Kedungombo. The teacher who became the source of the data was a class teacher who taught grades 1 to 6. The students who took data were students from SD Negeri 1 Kedungombo, Baturetno District from grade 1 to grade 6 totaling 87 students. The data collection technique used was documentation. , interviews and observations. The research instrument is described in the table below:

Variable	Indicator	Observational aspect
	Early learning activities	Pray Student attendance Delivering learning materials Delivering learning objectives Apperception
The process of implementing Cultivation of independent character	Learning Core Activities	Learning strategies Learning approaches Learning model Learning methods Media/props Teacher and student interaction Learning evaluation

	Motivation and rewards Feedback Follow-up learning
Learning Closing Activities	

The data analysis technique used is through the stages of data collection, reduction, display and conclusion. The data that has been obtained is reduced by simplifying, classifying and removing unnecessary data so that it only produces meaningful information and makes it easier to draw conclusions. Then the next stage is data display or data presentation. The data that has been reduced is then arranged in a systematic and easy-to-understand way to draw conclusions. The last stage is drawing conclusions. In this stage, the meaning of the data collected is sought by looking for relationships, similarities or differences to draw conclusions as answers to existing problems.

The validity test in this research uses triangulation to test the validity of the data, namely by technique/method triangulation, theory triangulation and source triangulation. Triangulation Technique/method is a technique that is carried out using various techniques. Different data collection to get data from the same source(Sugiono, 2015). The technique carried out by the researcher is in the form of a preliminary study, the aim is to determine the object to be studied, then observations and interviews are carried out with the principal, class teacher and students to find out the implementation of civilizing independent character education in limited face-to-face learning in mathematics at SD Negeri 1 Kedungombo, Baturetno District. Theory triangulation results in the formulation of information that can be compared to produce more precise conclusions. Source triangulation is done by checking the data that has been obtained from several sources. In this study, the researchers checked the data obtained from interviews with the principal and class teachers as well as observations regarding independent character education in post-pandemic mathematics learning owned by students.

3. RESULT AND DISCUSSION

3.1 Result

The research data was obtained by researchers by conducting observations, documentation and interviews with school principals, class teachers, and students of SD Negeri 1 Kedungombo

regarding the application of civilizing independent character education in mathematics learning during post-pandemic PTMT. The results of the interview with the Headmaster revealed that the implementation of Limited Face-to-face Learning (PTMT) had been carried out at SD Negeri 1 Kedungombo, Baturetno District since October 2021. The decision to implement the PTMT was taken by the Principal after receiving a circular from the Head of the Education and Culture Office of Wonogiri Regency number 420/5330 regarding notification of PTMT stage I.

The PTMT period is a transitional period of transition from online learning activities to limited face-to-face learning that takes place again in the classroom. The principal explained that the priority values were applied in the implementation of PTMT learning. The school does not set a target for achieving student learning outcomes, but the school urges class teachers and subject teachers to prioritize the health of school residents and return to civilizing character education in students in accordance with SE No. 2021".

The school's anticipation of the outbreak that has not fully subsided and has complied with the regulations from the Ministry of Education and Culture, an entry schedule regulation is made for students. The schedule distribution is adjusted to the applicable regulations, namely the number of students in one school is only 50% per day, for groups with more than one student. of 14 students, it must be divided into 2 entry sessions, and in one day, all grade levels are only allowed to carry out 4 hours of lessons.

The limited face-to-face schedule after the pandemic at SD Negeri 1 Kedungombo, Baturetno can be seen in table 2 below:

Day	Class	Session 1	Session 2
Monday	Ι	07.00 - 09.20	09.30 - 11.50
	III	07.00 - 09.20	09.30 - 11.50
	V	07.00 - 09.20	-
Tuesday	II	07.00 - 09.20	-
-	IV	07.00 - 09.20	09.30 - 11.50
	VI	07.00 - 09.20	09.31 - 11.50
Wednesday	Ι	07.00 - 09.20	09.30 - 11.50
	III	07.00 - 09.20	09.30 - 11.50
	V	07.00 - 09.20	-
Thursday	II	07.00 - 09.20	-
	IV	07.00 - 09.20	09.30 - 11.50
	VI	07.00 - 09.20	09.30 - 11.50

Table 2. PTMT Schedule for SD Negeri 1 Kedungombo

Friday	Ι	07.00 - 09.20	09.30 - 11.50
	III	07.00 - 09.20	09.30 - 11.50
	V	07.00 - 09.20	-
Saturday	II	07.00 - 09.20	-
	IV	07.00 - 09.20	09.30 - 11.50
	VI	07.00 - 09.20	09.30 - 11.50

The implementation of character education, including independent character, is an important part of post-pandemic PTMT learning. Learning mathematics is one of the targets for the cultivation of independent character education. Through the presentation of the class teacher, data were obtained that: (a) In the early post-pandemic PTMT period, students had difficulty adjusting to the mathematics learning process. (b) Students have not been able to focus on participating in direct learning. (c) Students have difficulty understanding the material given by the teacher directly. (d) Students have difficulty solving math problems given by the teacher independently. (e) Students are not confident in answering the questions given by the teacher. (f) There is a significant difference between the learning outcomes obtained by students during the distance learning period and direct learning in the classroom.

Based on the explanation of conditions at the beginning of the post-pandemic entry, the teacher made efforts by prioritizing mathematics subjects at the PTMT meeting. The lesson schedule is made by entering the hours of mathematics lessons in each PTMT. Mathematics learning activities are carried out at the beginning of the lesson with the condition that students are ready to accept learning. The teacher tries to complete the hours of mathematics lessons according to the plan that has been made. If there are obstacles so that mathematics learning is not completed, the teacher will give assignments to students to do at home. The teacher motivates by emphasizing that all tasks are done independently and communicate with parents related to the work given.

Mathematics learning activities carried out by teachers in post-pandemic PTMT still prioritize health problems, but through school programs, teachers seek to re-culture the application of independent character education to students, especially in learning mathematics. This can be seen from the initial activities, core activities and closing activities carried out by the teacher towards the cultivation of independent characters in mathematics learning during the post-pandemic PTMT at SD Negeri 1 Kedungombo, Baturetno.

3.2 Early Learning Activities

The activities carried out by the teacher in the initial activities as a step to cultivate student learning independence in learning mathematics during PTMT are carried out through:

Starting learning with apperception that leads to the concentration of students in receiving learning.

Cultivating student independence in learning mathematics during the post-pandemic PTMT was also carried out by teachers at SD Negeri 1 Kedungombo. The independence of students during PTMT is very lacking, especially in mathematics. The habituation of independence in learning mathematics by students starts from apperception. Apperception used in starting learning activities adjusts to the material being studied. Apperception using media/props related to the material. For example, in high school the material is to find the perimeter of a rectangle using a piece of stick, determine a flat net using a cube that is opened. Likewise in the lower class, real objects such as leaves, sticks, straws or stones are used by the teacher as a medium in opening lessons. By paying attention directly, students will be interested and willing to learn.

3.3 Learning Core Activities

Activities carried out by teachers to foster student independence in learning mathematics during post-pandemic PTMT in core activities include:

3.3.1 Using methods that are appropriate to the material to be studied

In an effort to cultivate independent learning in students, the teachers of SD Negeri 1 Kedungombo seek to establish an appropriate learning plan. In post-pandemic learning which has strict rules where lesson hours are limited to only 4 lessons per day, mathematics gets the main portion in PTMT. All classes apply compulsory math hours during the post-pandemic PTMT. Learning models and methods are really carefully selected in teaching certain materials. The handling of material from one another to be taught to students is different. The method must be really carefully chosen so that students can absorb easily the material being taught. The right method can also be used to familiarize students with independence in learning, especially learning mathematics. The teacher chooses a method that is in accordance with the material to be taught to students when teaching mathematics, mostly using the inquiry or demonstration method. For the learning model, the teacher uses STEM or PJBL. The results of the application of the method in accordance with the material, namely the increase in student learning outcomes.

Interviews conducted with teachers in charge of low grades obtained data that low grade students in the 2021/2022 academic year were students who had never studied directly with

teachers at school. In particular, class I and Class II students are students who have never met face-to-face in the learning process. Students carry out learning through online / PJJ accompanied by parents. Thus, student learning independence is very low. To regenerate student learning independence, teachers use demonstration learning methods and CTL.

3.3.2 Familiarize students to be involved in the learning process

Learning can be well absorbed by students if students are directly involved in the learning process. This is a guideline for teachers at SD Negeri 1 Kedungombo, Baturetno sub-district in providing learning for their students. The data obtained confirms that in the learning process students must be involved, especially in learning mathematics. By providing direct learning experiences, students will understand the learning material so that they will remember how to solve a problem.

The teachers at SD Negeri 1 Kedungombo, both in the low class and in the high class, always prioritize the learning process that involves students. Seen in mathematics learning activities, students actively participate in problem solving. Students are given the confidence to be independent in carrying out the learning process with the guidance of the teacher. With students experiencing directly the process of solving mathematical problems, students will remember how to solve these problems.

The involvement of students in the learning process will make it easier for students to remember solving a problem. So that then students will understand how to solve and solve a problem independently.

3.3.3 Familiarize students independently in completing assignments and the problems they face The teacher's role in cultivating student learning independence is not easy. The pandemic period that allows students to study from home remotely contributes a lot to students' dependence on others in completing the assigned tasks. Teachers of SD Negeri 1 Kedungombo are required to be able to guide students to grow again and be able to cultivate independence in learning, especially in learning mathematics during PTMT after the pandemic. Learning that is carried out by PTMT in learning mathematics at SD Negeri 1 Kedungombo during PTMT, students tend to have difficulty solving problems independently. This is because the factors: (1) Accustomed to depending on others in solving problems during PJJ/online learning. (2) Lack of understanding of the material being studied. (3) Lack of responsibility in completing the given task. (4) Lack of confidence in completing tasks with the abilities possessed. (5) It is easy to find answers through smart phones.

Based on these factors, teachers at SD Negeri 1 Kedungombo take steps to familiarize students to be independent in completing the tasks given. The steps taken by the teachers of SD Negeri

1 Kedungombo in getting students to be independent in doing assignments or solving problems they face are: (1) Checking how far the students' ability to absorb the subject matter is by asking questions directly with students. (2) Require students to write all assignments themselves, both assignments at school and homework. (3) Require students to complete all assignments on their own, both school assignments and homework. (4) Take a personal approach to students with low learning abilities. (5) Give strict sanctions if students cheat on a friend's work.

3.4 At the closing activity

Activities carried out by teachers to foster student independence in learning mathematics during post-pandemic PTMT in closing activities by: Provide motivation/encouragement that can foster independent learning in students.

Motivation has an important role in the success of an educational process. Through the motivation or encouragement given, students are able to interact well in the learning process. Teachers have an important role to be able to help students achieve their optimal level of motivation by paying attention to the components and factors that influence them. The steps taken by the teachers of SD Negeri 1 Kedungombo as an effort to motivate students to cultivate independent characters in learning mathematics at post-pandemic meetings are: (a) Motivating students by giving praise and praise to students' success in completing the assigned tasks. (b) Provide a reward board containing the star's name for students who successfully complete the task independently correctly. (c) Giving a reward by being asked to go home first when the bell rings for the student with the most stars. (d) Punish students by clearing the class for those who get the fewest stars. (e) Provide a reward in the form of stationery/snacks for students who can solve math problems for the first time.

Motivation is given by the teacher at SD Negeri 1 Kedungombo to students with the aim of being able to foster student interest and enthusiasm for learning mathematics. Through high enthusiasm in participating in mathematics learning, it is hoped that teachers can foster a sense of responsibility in students to complete the assigned tasks independently. The motivation given continuously and continuously by the teacher at SD Negeri 1 Kedungombo through various actions can help increase the students' independence in learning mathematics

3.5 Discussion

Cultivation of independent character in learning mathematics has been carried out by teachers at SD Negeri 1 Kedungombo. This can be seen in the mathematics learning activities carried out during the post-pandemic PTMT. Learning activities are focused on the ongoing mathematics learning process, namely in the initial activities, core activities and closing activities. The learning process that takes place involves the habituation of independent character in students. If the school only focuses on learning on the cognitive aspect, it will result in character values that should be internalized into students getting less attention in the learning process.(Cahyani et al., 2020). Based on this statement, SD Negeri 1 Kedungombo seeks to cultivate low student independence after learning is carried out online.

The process of mathematics learning activities carried out has been designed according to the PTMT rules. Teachers are encouraged to apply learning models that integrate character values but still promote interest in learning in the learning process(Syamsuddin et al., 2021). Interest in learning is needed in the success of a learning. Mathematics is an abstract lesson. If there are problems in mathematics lessons, such as students' lack of enthusiasm in learning, it will have an impact on reducing student activity in class(Rahmayani & Amalia, 2020). The reduced interest of students and the activeness of students in the classroom will have an impact on the decline of students' learning independence in participating in mathematics learning activities. Overcoming this, the school program stipulates that student independence as part of character education needs to be cultivated in the initial activities, core activities and final activities of learning mathematics. Teachers at SD Negeri 1 Kedungombo started the habit of independent learning in the early activities of learning mathematics. The initial activity carried out by the teacher was apperception with the help of media/props.

The beginning of learning during the first few minutes is the time that plays a role in determining the next hour of learning, and in those few minutes the teacher must provide the right apperception.(Chatib, 2014). This statement should be made by the teacher considering that students must know how to study independently during the post-pandemic PTMT in a limited time. The goal is to form an independent learning character and in the end it can improve student learning outcomes. The apperception has also been carried out well by the teachers at SD Negeri 1 Kedungombo.

Saidah's research results show that the apperception made by the teacher when starting learning plays an important role in ensuring that students are ready to follow the next learning process(Saidah et al., 2021). In line with this research, the civilizing of students' independence in learning mathematics during the post-pandemic PTMT was also carried out by teachers at SD Negeri 1 Kedungombo. With an interesting apperception, students will be interested and focused on the material so that the material can be absorbed maximally by students. Apperception in the form of media and teaching aids is more interesting for students to learn independently compared to asking hook questions to mathematics learning materials. The teacher mustwise in choosing and determining what media is right to be taught to students(Rahmawati, 2022). The data obtained show that in the low and high grades,

apperception can be done by the teacher to prepare students to receive lessons independently using appropriate media and teaching aids in accordance with the mathematics learning material.

The independence that exists in students is able to improve student learning achievement because it is able to improve learning performance, namely by planning, determining, and evaluating learning both during practical and theoretical learning.(Siagian et al., 2020). The use of quality teaching materials and using realistic learning-based mathematics education approach was suggested by Hasibuan, et al in their research as an effort to improve problem solving skills and student learning independence(Hasibuan et al., 2018). In line with this research, teachers at SD Negeri 1 Kedungombo also carry out a learning process that is considered capable of improving learning outcomes through cultivating independent characters in core activities through appropriate learning strategies. The determination of the learning strategy has been adjusted to the lesson schedule during the PTMT period after the COVID-19 pandemic. This means that the strategy used can accommodate all learning materials that will be delivered to students in accordance with PTMT rules which require schools to only hold 4 hours of learning.

The learning strategy includes learning methods and models used to foster student independence and have an impact on student mathematics learning outcomes. The learning method is the method used to implement the plans that have been prepared in real activities so that the objectives that have been prepared are achieved optimally(Sanjaya, 2016). The teacher chooses a method that is appropriate to the material to be taught to students when teaching mathematics, the teacher chooses to use the inquiry, demonstration and CTL methods. In line with research conducted by Husna which integrates the value of independent character in problem-based and contextual cooperative learning strategies(Husna, 2017). With this method, it allows students to be active directly in the learning process. While the learning model used, the teacher chooses STEM or PJBL. The learning model was chosen because it was considered appropriate to be used in meeting the predetermined mathematics learning objectives, but still guided by the PTMT rules. The success of student learning is determined by the mathematics learning model applied by the teacher and the students' independent learning skills. Through the right learning methods and models, students' self-study skills are obtained that accompany the increase in student learning outcomes(Novantri et al., 2020).

The learning carried out during the core activities also directs students to be directly involved in the mathematics learning process. This is applied by the teacher as an effort to cultivate student independence in learning mathematics. Implementation of character education teaching can be done during contextual teaching and learning(Tri et al., 2018). Through observation and being directly involved in the process of finding the answer to a problem, there will be a change in behavior so that students have a level of thinking, learn to be independent without relying on the help of others.(Hidayat et al., 2020). Thus students' learning independence will be formed along with the growing responsibility to solve the math problems they face.

The teacher's participation in the activity of cultivating student independence in learning mathematics is very dominant. The teacher's character has an important role to be used as an example in the inculcation of character values(Panggabean, 2022). Teachers are required to be able to overcome all problems so as to achieve the goals of learning mathematics that have been set. The teacher in implementing independent character education in the 2013 curriculum in the classroom is by giving individual assignments to students(Maryono et al., 2018). Teachers must be able to provide examples of attitudes and behavior models that show independence so that they can change student learning patterns from online learning to limited face-to-face learning after the pandemic. In integrating the character values, the teacher provides examples of good attitude models so that students look polite, respectful, active, and responsible and have better learning independence.(Suyitno et al., 2019). With this example, students are expected to have the ability to solve their own problems without the help of others. The strategy for implementing mathematics learning that is applied by the teacher is to foster student learning independence in the implementation of learning, one of which is by the teacher familiarizing students to do assignments independently(Kova, 2021).

Activities carried out as a form of civilizing independence to close learning are by motivating students to always be independent and responsible in participating in mathematics learning activities. Learning motivation is a psychological factor in students that causes students to have the drive to learn, this is characterized by attention, enthusiasm and awareness to learn(Febriandar, 2018). Teachers must have the ability to motivate students to have high enthusiasm in learning mathematics independently. The motivation given by the teacher at SD Negeri 1 Kedungombo by sticking a star board in the classroom can help foster student enthusiasm in learning mathematics along with increasing the independence and responsibility that students will have. Teachers must be able to determine the right strategy to be able to create a good learning atmosphere so that students can feel comfortable, happy, and passionate in participating in the learning process.(Kamaluddin, 2017).

The teacher's strategy in learning Mathematics with students who have low motivation by using various methods and activities, making students active participants, creating a conducive classroom atmosphere, being involved in helping students achieve results, avoiding

interpersonal competition, enthusiastic in teaching, giving awards to motivate, create activities that involve all students in the class, avoid using threats, and don't be the teacher that students fear(Rahmayani & Amalia, 2020). As a result of the pandemic, teachers are becoming more innovative in packaging teaching materials and are more creative in developing learning methods to attract student enthusiasm (Ayu Suci, 2020). So that in post-pandemic learning, students will be facilitated and get maximum learning results along with the growth of independent character education in students.

4. CLOSING

Character education has become an inseparable part of the education process carried out. The implementation of the cultivation of independent character education in mathematics learning during the post-pandemic PTMT has been attempted by SD Negeri 1 Kedungombo, Baturetno sub-district, Wonogiri district. The teacher as the subject of implementing independent character cultivation in learning mathematics plays a major role. The strategy applied by the teacher in cultivating student independence in the mathematics learning process, including in the initial activities carried out by the teacher when carrying out the mathematics learning process, is to carry out apperception using media/props that are in accordance with the material to be studied. The learning process in the core activities, the teacher applies:Familiarize students to be involved in the learning process, (c) Familiarize students to be independent in completing tasks and problems they face. In the closing activity the teacher provides motivation / encouragement that can foster independent learning in students.

REFERENCES

- Akhwani, MAR (2021). Character Education during the Covid-19 Pandemic in Elementary School. Indonesian Journal of Primary Education, 5(1), 1–12. http://ejournal.upi.edu/index.php/IJPE/index
- Cahyani, RP, Irianto, A., & Yustisia, V. (2020). Formation of Independent Character Through Thematic Learning at SDN Kebondalem Mojosari. Didactic: Journal of Education and Science, 20(3), 236–244. http://103.114.35.30/index.php/didactic/article/view/4789
- Chatib, M. (2014). Human teacher. Kaifa PT Mizan Pustaka.
- Dwi Rita Nova, D., & Widiastuti, N. (2019). Formation of Children's Independent Character Through Activities Riding Public Transportation. Comm-Edu (Community Education Journal), 2(2), 113. https://doi.org/10.22460/comm-edu.v2i2.2515
- Febriandar, EI (2018). The Influence of Teacher Creativity In Applying Ice Breaking And Learning Motivation Towards Learning Outcomes Of Elementary School Students.
 Briliant: Research and Conceptual Journal, 3(4), 498. https://doi.org/10.28926/briliant.v3i4.253

Gatoto, M. (2007). Elementary Mathematics Learning (p. 1.26). Jakarta: Open University.

Hasibuan, AM, Saragih, S., & Amry, Z. (2018). Development of Learning Materials Based on Realistic Mathematics Education to Improve Problem Solving Ability and Student Learning Independence. International Electronic Journal of Mathematics Education, 14(1), 243–252. https://doi.org/10.29333/iejme/4000

- Hidayat, DR, Rohaya, A., Nadine, F., & Ramadhan, H. (2020). Independent Learning of Students in Online Learning During the Covid-19 Pandemic. Educational Science Perspective, 34(2), 147–154. https://doi.org/10.21009/pip.342.9
- Husna, L. (2017). Independent Character Education for Fourth Grade Students at Aisyiyah Superior Elementary School, Bantul. Journal of Eprints@UNY.
- Kamaluddin, M. (2017). The effect of learning motivation on mathematics learning achievement and strategies to improve it. Seminar on Mathematics and Mathematics Education, 67(9), 455–460.
- Kova, DK (2021). Teacher Strategies in Instilling Independent Characters in Elementary School Students in Online Learning during the Covid-19 Pandemic. 6.
- Maryono, Budiono, H., & Okha, R. (2018). Implementation of Independent Character Education in Elementary Schools. JOURNAL OF GENTALA PRIMARY EDUCATION, 3(1), 20–38. https://doi.org/10.1044/2018_AJSLP-17-0074
- Novantri, W., Maison, M., Muslim, M., & Aftriyati, LW (2020). Are Discovery Learning and Independent Learning Effective in Improving Students' Cognitive Skills? Indonesian Journal of Science and Mathematics Education, 3(2), 144–152. https://doi.org/10.24042/ijsme.v3i2.6615
- Panggabean, JZZ (2022). Reflecting the value of character education in lesson planning. Primary School Scientific Journal, 6(1), 231–241.
- Rahmawati, N. (2022). Teacher Problems During the Implementation of Learning in the New Normal Era in Elementary Schools. 6(1), 176–185.
- Rahmayani, V., & Amalia, R. (2020). Strategies to Increase Students' Motivation in Learning Mathematics in Classroom. Journal on Teacher Education, 2(1), 18–24. https://doi.org/10.31004/jote.v2i1.901
- Saidah, K., Primasatya, N., Mukmin, BA, & Damayanti, S. (2021). Socialization of the Role of Apperception to Improve Children's Learning Readiness at the Genius Studio, Yatim Mandiri Foundation, Kediri branch. Dedication of the Archipelago, 1(1), 18–24. https://ojs.unpkediri.ac.id/index.php/dedication/article/view/16065/2102
- Sanjaya, W. (2016). Educational Process Standard Oriented Learning Strategy (12th ed.). Kencana Prenada Media.
- Siagian, H., Pangaribuan, JJ, & Silaban, PJ (2020). The Effect of Independent Learning on Students' Mathematics Learning Outcomes in Elementary Schools. Journal of Basicedu, 4(4), 1363–1369. https://doi.org/10.31004/basicedu.v4i4.528
- Sugiono. (2015). Quantitative Qualitative Research Methods and R&D. Alphabet.
- Suriadi, HJ, Firman, & Ahmad, R. (2021). Analysis of Online Learning Problems on Character Education of Students. EDUCATION: JOURNAL OF EDUCATIONAL SCIENCES, 3(1). https://doi.org/10.31004/edukatif.v3i1.251
- Suyitno, H., Zaenuri, Sugiharti, E., Suyitno, A., & Baba, T. (2019). Integration of character values in teaching-learning process of mathematics at elementary school of Japan. International Journal of Instruction, 12(3), 781–794. https://doi.org/10.29333/iji.2019.12347a
- Syamsuddin, A., Babo, R., Sulfasyah, & Rahman, S. (2021). Mathematics learning interest of students based on the difference in the implementation of the model of thematic learning and character-integrated thematic learning. European Journal of Educational Research, 10(2), 581–591. https://doi.org/10.12973/EU-JER.10.2.581
- Tri, M., Roemintoyo, R., & Yamtinah, S. (2018). Textbooks Thematic Based Character Education on Thematic Learning Primary School: An Influence. International Journal of Educational Methodology, 4(2), 75–81. https://doi.org/10.12973/ijem.4.2.75