

DISASTER EDUCATION BASED ON MUHAMMADIYAH VALUES THROUGH THE INSIDE OUTSIDE CIRCLE TECHNIQUE FOR EARLY CHILDHOOD AT RA NURROHMAN DONOROJO

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Abstract

This study aims to describe the implementation of disaster education based on Muhammadiyah values through the Inside Outside Circle technique for early childhood at RA Nurrohman Donorojo. The study employed collaborative Classroom Action Research (CAR) using the Kemmis and McTaggart model, which consisted of planning, action, observation, and reflection stages. The research was conducted in two cycles involving 26 children of Group B2, consisting of 14 boys and 12 girls. Data collection techniques included observation, documentation, and field notes. The research instruments used observation sheets with indicators of participation, communication skills, cooperation, and children's understanding of disaster preparedness. Data were analyzed using descriptive quantitative and qualitative techniques. The results showed that the implementation of the Inside Outside Circle technique created an interactive, enjoyable, and participatory learning atmosphere. Children became more active in communicating, more confident in expressing opinions, and better able to understand simple disaster preparedness concepts. The percentage of children achieving the criteria of Developing as Expected (BSH) and Very Well Developed (BSB) increased significantly from 13.4% in the pre-cycle to 37.5% in Cycle I, and reached 83.6% in Cycle II, exceeding the predetermined success indicator of 75%. The technique also contributed to the development of social-emotional skills such as cooperation, discipline, empathy, and caring attitudes, which reflect Muhammadiyah values. In conclusion, disaster education based on Muhammadiyah values through the Inside Outside Circle technique is effective in improving children's participation, communication skills, and understanding of disaster preparedness in early childhood learning. This method can be used as an alternative interactive and child-friendly learning strategy in early childhood education institutions.

Keywords: Disaster Education, Muhammadiyah Values, Inside Outside Circle, Early Childhood Education, Cooperative Learning.

INTRODUCTION

Indonesia is a country located in the area of the ring of fire (*Ring of Fire*) so that it has a high level of disaster vulnerability, such as earthquakes, floods, landslides, and tsunamis. (Purwanto, 2017). This condition requires disaster education from an early age so that children have knowledge, attitudes, and preparedness in dealing with emergency situations. Disaster education in early childhood not only serves to introduce the types of disasters, but also instills the value of care, courage, and the ability to communicate when facing dangerous conditions (Fedryansyah, 2024). In the context of Islamic education, Muhammadiyah's values such as social concern, help, discipline, and responsibility can be integrated in disaster learning as a form of strengthening children's character from an early age. Therefore, disaster learning based on Muhammadiyah values is important to be applied in early childhood education institutions, including in RA Nurrohman Donorojo which is in a disaster-prone area of Pacitan Regency.

Disaster learning for early childhood needs to be packaged in an attractive, communicative, and appropriate manner with the learning characteristics of children who actively play and interact (Krismawati, 2018). Early childhood tends to understand material more easily through hands-on activities, simple conversations, and collaborative activities with peers. However, in classroom learning practice, disaster materials are often still delivered in one direction so that children are less actively involved in the communication and learning process. As a result, children are not able to express understanding, experience, and simple steps in dealing with disasters. In fact, the ability to speak has

an important role in disaster learning, because through communication children can convey information, ask for help, and respond appropriately to emergency situations. Therefore, a learning strategy is needed that is able to integrate disaster education with the development of children's speaking skills in a fun and participatory manner.

Speaking skills are one of the important indicators in achieving early childhood language development. In the Child Development Achievement Level Standard (STTPA) of the Minister of Education and Culture Number 137 of 2014, children aged 5-6 years are expected to be able to tell their experiences, express feelings, ask questions, and answer questions using simple sentences that can be understood by others. (Fatmawati & Wiranti, 2023). During this period, children experience rapid development that requires optimal stimulation so that communication skills develop optimally. Speaking skills allow children to express ideas, feelings, and interact with their social environment.

However, in the practice of learning in PAUD, children are still found to lack confidence, passivity, and have limitations in the use of vocabulary. This is due to learning methods that are less varied and have not provided enough interaction opportunities. In fact, according to Vygotsky, children's language development is greatly influenced by social interaction with adults and peers through *zone of proximal development* (Maulindani et al., 2025). If this condition is left unchecked, the impact is quite serious (Achmad & Wijayanti, 2025). Susanto stated that children with low speaking skills tend to withdraw from socializing, have difficulty following instructions, and have negative self-concept (Yandika Fefrian Rosmi & Jauhari, 2020). In the context of learning, children will have difficulty when they have to present, answer the teacher's questions, or discuss. Therefore, a learning method is needed that is able to create simultaneous interactions, provide a sense of security and fun for early childhood (Melani & Prahastiwi, 2025).

Therefore, a learning method is needed that can encourage children's active participation while creating a pleasant learning atmosphere (Scott, 2025). One of the methods that can be used is the *Inside Outside Circle* developed by Spencer Kagan (1994). This method is a cooperative learning technique that involves pairing activities in two circles (inner and outer circles) (Susanti & Eka Danik Prahastiwi, 2025), allowing children to share information, ask questions, and answer alternately (Achmad & Wijayanti, 2025). The advantages of this method for early childhood are: (1) each child gets an equal opportunity to speak, (2) reduces anxiety because they are only dealing with one friend, and (3) creates a learning environment while playing that suits the child's characteristics. (4) there is repetition so that the child's vocabulary and the child's fluency are trained naturally (Prahastiwi, Efendi, et al., 2024).

The steps for applying the *Inside Outside Circle* technique in Muhammadiyah's value-based disaster learning are as follows:

1. Circle Formation
The teacher divided the 26 children into two equally large groups. A total of 13 children formed an inner circle facing outward, while the other 13 children formed an outer circle facing inward so that each child had one partner to discuss.
2. Topic Delivery
The teacher provides themes, pictures, or questions related to disaster learning, such as about floods, earthquakes, heavy rains, or how to save yourself in the event of a disaster. The teacher first gave examples of simple sentences, such as: "If there is an earthquake we take shelter under the table" or "During the flood we have to be careful". In addition, teachers also instill Muhammadiyah values such as helping, discipline, and caring for others.
3. Paired Discussions
Children in the inner circle and outer circle share information with each other according to the learning theme for 2–3 minutes. Children are invited to tell their experiences, answer questions, or express simple opinions about disasters. Teachers go around providing *scaffolding* and assistance to children who have difficulty speaking or understanding the material.
4. Rotation
After the discussion time is over, the teacher gives a "spin" cue. The child in the outer circle shifts one step clockwise until it acquires a new partner. Furthermore, the discussion was again carried out with the same topic or a follow-up topic regarding disasters.

5. Repetition and Reflection

Rotation is carried out 3-4 times in one meeting so that children have the opportunity to interact with several different friends. At the end of the activity, some children were asked to volunteer to deliver the results of the discussion in front of the class. The teacher then provided reinforcement of the disaster material and the values of Muhammadiyah that had been learned during the activity.

With this mechanism, in one 30-minute meeting, each child gets at least 3 opportunities to speak. This is much more than the classical method which only gives 2-3 children a chance (Irfan et al., 2025). Method application *Inside Outside Circle* In learning, it is expected to improve early childhood speaking skills, as this method provides ample opportunities for children to practice speaking directly in an interactive and non-stressful atmosphere (Cahyono et al., 2022; Prahastiwi, Budiarti, et al., 2024). In addition, activities that are done repeatedly with different partners can enrich vocabulary and increase the child's confidence (Cahyono et al., 2022).

Based on this description, this study aims to describe the application of Muhammadiyah value-based disaster learning through *the Inside Outside Circle technique* for early childhood at RA Nurrohman Donorojo. Through this technique, children are expected to be able to actively participate in the learning process, dare to express opinions, and understand the values of disaster preparedness from an early age. The results of this study are expected to contribute to the development of disaster learning models that are interactive, communicative, and in accordance with the characteristics of early childhood, as well as strengthen the implementation of Muhammadiyah values in early childhood education.

RESEARCH METHODS

This study uses collaborative Classroom Action Research (PTK). PTK was chosen because it aims to improve the disaster learning process based on Muhammadiyah values through techniques *Inside Outside Circle* for early childhood. This study refers to the model of Kemmis and McTaggart (1988) which consists of the stages of planning, implementation of actions, observation, and reflection. The research was carried out in two cycles and each cycle consisted of two meetings. The research was carried out at RA Nurrohman Donorojo in April for the 2025/2026 school year with the theme "Disasters" and the subtheme "Natural Disasters in the Surrounding Environment". The subjects of the study were children of group B2 consisting of 14 boys and 12 girls. The object of the research is the application of disaster learning based on Muhammadiyah values through the *Inside Outside Circle* for early childhood (Amalia et al., 2025).

The research was carried out in two cycles. If in cycle I the success indicators have not been achieved, then the research will continue in cycle II. The stages in the first cycle include: (1) Planning, namely compiling RPPH, preparing image media and disaster themed educational cards, compiling *Inside Outside Circle learning* scenarios, and preparing observation sheets; (2) The implementation of actions, namely carrying out learning by dividing children into two groups that form an inner circle and an outer circle. The child discusses with the partner about the theme of the disaster for 2 minutes, then the outer circle shifts to get a new partner. Activities are carried out 3-4 rotations per meeting; (3) Observation, i.e. collaborators observe children's activities during activities using observation sheets that include indicators of participation, courage to communicate, cooperation, and a simple understanding of disasters. Documentation is carried out through photos of activities and field notes; (4) Reflection, which is analyzing the results of observations and determining improvements in the next cycle. Weaknesses in the first cycle were corrected in the second cycle, such as increasing the discussion time to 3 minutes, using more interesting media, and giving example sentences by the teacher before the activity started.

Data collection techniques use: (1) observation, to observe the learning process and children's participation during *Inside Outside Circle activities*; (2) documentation, in the form of RPPH, photos of activities, learning media, and children's attendance lists; and (3) field notes to record various important events that are not listed in the observation sheet, such as the child's emotional response, enthusiasm, and technical obstacles during learning. The research instrument is in the form of an observation sheet with an assessment rubric using a scale of 1–4 which includes indicators of active participation, communication skills, cooperation, and simple disaster understanding.

Data analysis techniques are carried out descriptively, quantitatively, and qualitatively. Quantitative analysis was used to calculate the percentage of achievement of learning indicators in each cycle, while qualitative analysis was used to describe the results of observations, field notes, and changes in children's behavior during the learning process. The indicator of research success is determined if at least 75% of the number of children reaches the categories of Developing As Expected (BSH) and Developing Very Good (BSB) in the indicators of participation, communication, cooperation, and understanding of disasters at the end of cycle II. In addition, learning is declared successful if the activity takes place actively, children are enthusiastic about participating in learning, and children show an attitude of courage, care, and ability to work together during *the Inside Outside Circle* activity.

RESULTS AND FINDINGS

Early childhood speaking skills are the ability of children to communicate ideas, thoughts, and feelings orally to others. According to Bromley (1992), speaking is a verbal communication process that children use to express their experiences and ideas. In children aged 5–6 years, speaking skills include the ability to use simple sentences, choose the right vocabulary, pronounce sounds clearly, and speak with a reasonable intonation. Tarigan (2008) also explained that speaking is the ability to pronounce articulated sounds or words to express thoughts, ideas, and feelings. In the context of early childhood, the ability to speak is very important because it is the main means for children to interact socially, convey needs, ask questions, and establish relationships with the surrounding environment. Vygotsky (1978) through *sociocultural theory* emphasized that children's language development occurs through social interaction and support (*scaffolding*) from teachers and peers. Therefore, learning for early childhood needs to provide wide interaction opportunities so that children can actively communicate and build their own understanding.

In Muhammadiyah's value-based disaster learning, speaking skills have an important role because children are not only introduced to the types of disasters, but are also trained to communicate attitudes of preparedness, concern, and simple actions when facing disasters. Through talking activities, children learn to convey information, ask questions, answer questions, and work together with friends in a fun learning atmosphere. Muhammadiyah values such as help, discipline, responsibility, and social concern can be instilled through verbal interaction during learning activities.

The *Inside Outside Circle method* is one of the structural approach type cooperative learning techniques developed by Spencer Kagan (1994). The main steps of this method include: (1) the child is divided into two groups that form an inner circle and an outer circle facing each other; (2) the teacher provides topics, pictures, or questions related to the theme of disaster learning; (3) the child discusses with the partner for 1-2 minutes; (4) at the teacher's urging, the outer circle shifts one step clockwise so that the child acquires a new partner and repeats the discussion with the same or continued topic; and (5) rotation is carried out 3-4 times so that children can interact with several different friends. This technique has advantages for early childhood because it is fun like a game, provides the opportunity to speak to the whole child, reduces anxiety, and trains vocabulary repetition naturally. Spencer Kagan (1994) calls the main principle of this method as *simultaneous interaction* and *equal participation*, which is that all children actively interact and get equal opportunities in learning.

The relationship between *the Inside Outside Circle method* and Muhammadiyah's value-based disaster learning lies in its ability to create active interaction and a safe learning environment for children. In this activity, children can be more courageous to speak because they only interact with one partner at a time, so that psychological pressure is lower than speaking in front of the class. Alternating pairs also makes children repeat information in their own language so that it helps to practice *retelling* and *elaborating* skills. In addition, through simple discussions about disasters, children learn to express opinions, listen to friends, and instill the value of caring for others. Krashen (1982) explained that a comfortable learning atmosphere can lower *affective filters*, so that children's courage and fluency in speaking can develop optimally. Thus, *the Inside Outside Circle method* is an effective strategy to support communicative, participatory, and early childhood disaster learning.

The indicators of speaking skills measured refer to the STTPA Permendikbud 137/2014 and modifications from Dhieni (2005), this research at RA Nuroohman Donorojo will use 4 indicators:

Yes	Indicator	Description of Observed Behavior	Score 1-4
1	Smoothness	Children are able to speak fluently without many pauses, repetition of words, or being silent for too long when discussing with their partner about the theme of disaster learning.	1= Not smooth, 4= Very smooth
2	Vocabulary	Children are able to use a variety of vocabulary in accordance with the theme of disaster learning, such as "flood", "earthquake", "heavy rain", "safe", "help", and "evacuation"	1= 1-2 words, 4= > 5 words vary
3	Courage	Children dare to start a conversation first, make eye contact with their partner, and speak in a clear voice during <i>the Inside Outside Circle</i> activity .	1= Be silent, 4= Initiative and loud
4	Sentence Structure	Children are able to use simple sentences with a minimum S-P-O-K pattern in conveying opinions or information, for example "I took shelter under the table during the earthquake" or "We have to be careful when it rains heavily".	1= Past words, 4= Complete sentence

The action was said to be successful if $\geq 75\%$ of the 26 children achieved a minimum score of 3 "Progressing To Expect (BSH) on all four indicators at the end of cycle II.

The results of research on Muhammadiyah value-based disaster learning through *Inside Outside Circle* It begins with a description of the initial condition (pre-cycle). Before the action was carried out, the researcher conducted an initial observation of 26 children of group B2 at RA Nurrohman Donorojo in a learning activity with the theme "Disasters in the Surrounding Environment". The results of observations show that children's participation and communication skills in learning are still low. Children seem less confident to speak, still passive when the teacher asks questions, and not able to convey a simple understanding of the environment and disaster preparedness. In addition, learning is still dominated by lecture methods so that children's opportunities to interact and discuss with peers are still very limited. From several indicators measured, such as active participation, courage to speak up, cooperation, and simple understanding of disasters, most children are still in the Not Developing (BB) and Starting to Develop (MB) categories. This condition is the basis for the implementation of actions through the application of techniques *Inside Outside Circle* in disaster learning based on Muhammadiyah values.

Yes	Indicator	BB	MB	BSH	BSB	% BSH+BSB
1	Smoothness	15	8	2	1	11,5 %
2	Vocabulary	14	9	1	2	11,5 %
3	Courage	15	6	2	3	19,2 %
4	Sentence Structure	16	8	2	1	11,5 %

An average of 13.4% or 3 out of 26 children achieved the categories of Developing Well Towards Expectations (BSH) and Developing Very Good (BSB). The main obstacles found in the initial condition are that children are still shy to speak, participation in learning is still low, simple communication skills have not developed optimally, and learning is still dominated by lecture methods so that children do not have the opportunity to interact directly with peers. In addition, in disaster learning, children are still passive and have not been able to convey a simple understanding of the environment and disaster preparedness. This condition is the basis for the implementation of actions through the application of *the Inside Outside Circle* technique.

Cycle I was held in two meetings with the theme "Disasters in the Surrounding Environment". The *Inside Outside Circle* technique is carried out in three rotations with a discussion duration of 2 minutes for each couple. The researcher and the teacher prepared the RPPH, prepared disaster themed image media, observation sheets, and scenarios for the implementation of *the Inside Outside Circle*. The teacher gives directions on how to form inner and outer circles and explains the rules of the activity to the child. At the first meeting, some children still looked confused when changing rotations and some children were still silent when getting a new partner. Teachers also often help children understand pictures and give examples of simple conversations one by one. At the second meeting, the children began to understand the rules of the game and the process of changing partners, but there were still

some children who needed to be given motivation and triggering questions by the teacher to dare to start a conversation. The results of observations in cycle I showed an increase in participation, courage to communicate, and children's involvement in disaster learning through *the Inside Outside Circle* technique.

Yes	Indicator	BB	MB	BSH	BSB	%BSH+BSB
1	Smoothness	6	10	7	3	38,5 %
2	Vocabulary	7	9	8	2	38,5 %
3	Courage	5	11	7	3	38,5 %
4	Sentence Structure	8	9	6	3	34,6 %

An average of 37.5% or 10 out of 26 children have reached the categories of Developing Well (BSH) and Developing Very Good (BSB), so they have not met the success target of 75%. In cycle I, the children looked very enthusiastic about participating in *the Inside Outside Circle* activity. All children get the opportunity to talk and interact with their partner in turn. However, the duration of the discussion for 2 minutes is still considered insufficient because the children only start interacting when the rotation time has been completed. In addition, the image media used is still too small so that it does not attract children's attention and is not optimal in helping the understanding of disaster material. Therefore, in cycle II, several improvements were made, namely increasing the duration of the discussion to 3 minutes, the teacher provided modelling or example sentences first, and image media was enlarged using A3 size to make it clearer and more attractive to children.

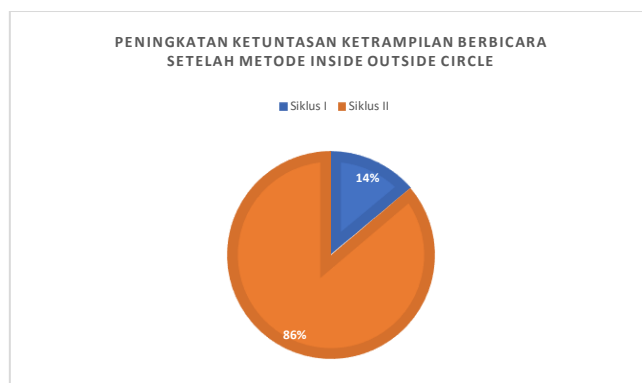
Cycle II was held in two meetings with the theme "Disasters and the Surrounding Environment". At the beginning of the lesson, the teacher gives a simple explanation and example sentences related to disaster preparedness, such as "If heavy rain can cause flooding, we must remain careful" or "If there is an earthquake we take shelter under the table". In cycle II, children seem to understand the stages of *the Inside Outside Circle* technique better so that the activity runs more orderly and directed. Children seem more ready to take part in learning, even some children begin to dare to say hello and invite their partners to discuss first. The learning atmosphere becomes more active, communicative, and fun. The results of observations at the end of the second cycle showed a very significant increase in participation, courage to communicate, cooperation, and children's simple understanding of disaster learning based on Muhammadiyah values.

Yes	Indicator	BB	MB	BSH	BSB	% BSH+BSB
1	Smoothness	1	4	11	10	80,7 %
2	Vocabulary	1	3	13	9	84,6 %
3	Courage	0	3	11	12	88,4 %
4	Sentence Structure	2	3	13	8	80,7 %

An average of 83.6% or 21 out of 26 children have reached the categories of Developing Well Expectant (BSH) and Developing Very Good (BSB). Thus, a minimum success indicator of 75% has been achieved. There are only 5 children who are still in the Starting Development (MB) category, which is influenced by communication and understanding skills that still require further assistance.

As a reflection material in cycle II, children look more courageous to start conversations, actively discuss with their partner, and are able to use new vocabulary related to disaster themes and the surrounding environment, such as "flood", "earthquake", "heavy rain", "help", and "safe". Children also begin to be able to convey simple sentences about preparedness measures, for example "in case of an earthquake we must take shelter under the table" or "if there is a flood we must be careful". This shows that disaster learning through the Inside Outside Circle technique not only improves children's participation and communication, but also helps children understand the basic concepts of disaster mitigation in a simple way.

The application of the Inside Outside Circle technique has a very positive impact on the learning atmosphere. Children look enthusiastic, active, and enjoy learning activities without fear or pressure. No children cried during the activity, even the teacher felt that the learning process became more lively, communicative, and fun. Therefore, this research was declared successful and was stopped in cycle II because it had achieved the set success target.



Picture 1. Difference between Cycle I and Cycle II

The success of Muhammadiyah's value-based disaster learning through the Inside Outside Circle technique is in line with the basic principles of Cooperative Learning put forward by Spencer Kagan (1994), namely simultaneous interaction and equal participation. Simultaneous interaction is an interaction that occurs simultaneously so that all children can actively communicate at the same time. Meanwhile, equal participation means that every child gets an equal opportunity to speak, ask questions, answer, and participate in learning activities. In previous classical learning, children's participation was still limited because only a few children actively answered the teacher's questions. Through the Inside Outside Circle technique, all children can be directly involved in discussions about disaster themes with different couples in turn. Thus, the frequency of children's interaction and communication has increased significantly compared to conventional learning.

The increase in children's active participation in disaster learning is in line with Vygotsky's (1978) theory that children's language development and understanding develop through intensive social interaction in the Zone of Proximal Development (ZPD). Through the paired discussion activity, children get the opportunity to exchange information about the types of disasters, simple steps to save themselves, and caring for others when a disaster occurs. Teachers play the role of scaffolding by providing example sentences, triggering questions, and simple directions so that children are able to understand disaster material better. The results of this study also show that the use of the Inside Outside Circle technique is able to create a more fun and less stressful learning atmosphere, so that children are more confident in expressing their opinions.

The results of the study showed positive changes in each learning indicator. First, the active participation indicator increases because the child gets the opportunity to talk and discuss directly with several different partners in each rotation. The addition of the duration of the discussion in cycle II provides space for children to think and convey their ideas without pressure. Second, the understanding of children's disasters is increased through the use of contextual image media with the theme of natural disasters that are interesting and easy for early childhood to understand. Children begin to be able to mention simple types of disasters, how to maintain personal safety, and the importance of helping each other when disasters occur. Interactions with multiple partners also enrich the child's understanding as they hear different information and experiences from peers.

Third, the courage indicator shows a very significant change. At the beginning of learning, some children still look shy, bowed, and reluctant to speak. However, after the application of the Inside Outside Circle technique, children become more courageous to express their opinions because the interaction is carried out in pairs so that psychological pressure is lower than speaking in front of the class. Learning situations that are packaged like games also make children feel comfortable and enthusiastic about participating in activities. This is in accordance with the opinion of Isjoni (2010) that cooperative learning structures can create psychological safety for children to participate actively.

Fourth, indicators of cooperation and social communication of children have also increased. Children learn to listen to their friends' opinions, wait for their turn to speak, and work together in conveying information about disasters. Through partner rotation, children can interact with a variety of friends so that their social and emotional abilities develop naturally. In addition, Muhammadiyah values such as help, discipline, care, and responsibility can be instilled through discussion and communication activities during learning.

Supporting factors for the success of this research include: (1) the use of contextual image media that is interesting and in accordance with the theme of disasters; (2) the teacher provides instructions and sentence examples clearly; (3) rotation activities are packaged in a play atmosphere so that children feel happy; and (4) an increase in the duration of discussions that provide wider opportunities for children to interact. However, this study still has limitations because it was only conducted in two cycles with a relatively short time so that it could not see the long-term impact on the understanding of children's disasters. In addition, this research focuses more on aspects of communication and children's participation, so other aspects such as listening and problem-solving skills have not been studied in depth.

Theoretically, this study strengthens Spencer Kagan's (1994) theory that the Inside Outside Circle technique is able to create equal participation and increase active interaction in learning. Practically, the results of the study show that the Inside Outside Circle technique can be used as an alternative to Muhammadiyah's value-based disaster learning strategy that is effective, participatory, and in accordance with the characteristics of early childhood. This research also proves that early childhood will be more active and confident when learning is designed in a safe, fun atmosphere, and provides equal interaction opportunities for all children.

RESULTS AND DISCUSSION

The results of this study show that disaster learning based on Muhammadiyah values through the Inside Outside Circle technique makes a positive contribution to the early childhood learning process at RA Nurrohman Donorojo. The application of this learning model has succeeded in creating an interactive, fun, and participatory learning atmosphere so that children are able to understand disaster concepts while developing communication and social interaction skills. The integration of Muhammadiyah values such as cooperation, care, discipline, responsibility, and helpfulness also strengthens the formation of children's character in disaster preparedness learning.

The success of the Inside Outside Circle technique can be understood through the principles of cooperative learning put forward by Spencer Kagan, namely simultaneous interaction and equal participation. Through the circle rotation activity, all children get the same opportunity to communicate, share information, and respond to their peers on disaster themes. In contrast to conventional learning which is often dominated by only a few active children, this technique encourages all children to be actively involved in the learning process. Repeated interactions with different partners also help children understand the concept of disaster mitigation in a natural and meaningful way.

Viewed from a sociocultural perspective, the findings of this study are in line with Vygotsky's theory which emphasizes the importance of social interaction in children's cognitive and language development. Learning activities provide opportunities for children to build knowledge collaboratively in the Zone of Proximal Development (ZPD). Teachers act as scaffolding by providing example sentences, triggering questions, and simple directions so that children can more easily understand disaster material. Through this process, children not only learn to recognize the types of disasters and simple steps to save themselves, but also learn to express their opinions, listen to others, and cooperate with peers.

In addition to increasing understanding of disasters, the application of the Inside Outside Circle technique also has an impact on children's social-emotional development. Children learn to wait their turns, respect their friends' opinions, and build confidence when speaking in front of others. The fun and game-based learning atmosphere makes children more enthusiastic about learning. This is in line with the characteristics of early childhood learning that emphasize learning activities while playing. Muhammadiyah's values that are integrated in learning activities also form an attitude of caring, responsiveness, and readiness to help others when facing disaster situations.

The findings of this study reinforce the results of previous research that stated that the Inside Outside Circle technique is effective in creating active and communicative learning for early childhood. However, this study still has limitations, including the relatively short implementation time and the different abilities of children in understanding disaster material. Therefore, further research is recommended to develop a more varied and sustainable disaster learning model by involving more interactive learning media.

Overall, this study emphasizes that disaster learning based on Muhammadiyah values through the Inside Outside Circle technique is an effective, fun, and appropriate approach in accordance with

the characteristics of early childhood. Through equal interaction opportunities, a safe learning atmosphere, and the integration of Islamic character values, this method is able to help children understand disaster preparedness while developing communication, social, and emotional skills optimally.

CONCLUSION AND SUGGESTIONS

Conclusions

Based on the results of the research carried out at RA Nurrohman Donorojo on 26 children in the B2 group, it can be concluded that disaster learning based on Muhammadiyah values through the Inside Outside Circle technique is able to create an active, interactive, and fun learning process for early childhood. The implementation of the Inside Outside Circle technique through activities of forming inner and outer circles, exchanging pairs in turn, and discussing disaster themes with a duration of 2-3 minutes has been proven to help children more easily understand disaster mitigation materials while increasing their courage in communicating. The integration of Muhammadiyah values such as cooperation, care, discipline, and help-helping also provides character strengthening in the learning process.

The application of the Inside Outside Circle technique showed an increase in children's active participation in disaster learning. Children who are initially passive and shy of talking become more confident because the communication process is carried out in pairs in a safe and fun play atmosphere. Through repeated interactions with different partners, children are able to convey simple information about disasters, answer questions, and express opinions more smoothly.

In addition to improving communication skills, this method is also effective in developing the social-emotional aspects of children. Children learn to work together, wait their turn, respect their friends' opinions, and build a sense of empathy and concern for the surrounding environment. Thus, disaster learning based on Muhammadiyah values through the Inside Outside Circle technique can be used as an alternative learning strategy that is participatory, communicative, and in accordance with the characteristics of early childhood, both in RA Nurrohman Donorojo and in other early childhood education institutions.

Suggestions

First, for teachers, it is recommended to apply interactive and cooperative learning methods such as the *Inside Outside Circle* technique consistently in disaster learning for early childhood. Teachers need to pay attention to factors that support learning, such as sufficient interaction duration, clear instruction, and the use of contextual and interesting learning media. In addition, teachers need to provide scaffolding in the form of example sentences, spark questions, and simple assistance so that children can more easily understand disaster material and dare to express their opinions. Teachers are also expected to be able to create a safe, fun, and play-based learning environment so that children feel comfortable to actively participate.

Second, for schools and educational institutions, support is needed for the implementation of innovative learning models through the provision of adequate learning facilities and media, especially disaster education media that are in accordance with the characteristics of early childhood. The school is also expected to provide opportunities for teachers to participate in training or workshops on cooperative learning strategies and character-based disaster education. Institutional support is very important so that disaster learning based on Muhammadiyah values can be carried out in a sustainable and effective manner in shaping children's preparedness from an early age.

Third, for future researchers, it is recommended to conduct research with a longer duration to determine the long-term impact of disaster learning through the Inside Outside Circle technique. Subsequent research may also develop the integration of this method with digital media, educational games, or other learning approaches to make it more varied and interesting for early childhood. In addition, research related to the application of this method to children with special needs or children with communication barriers is also important to produce more inclusive and adaptive learning strategies.

Overall, the Inside Outside Circle technique has proven to be an effective learning strategy in supporting Muhammadiyah value-based disaster learning for early childhood. Therefore, its application

needs to continue to be developed and adjusted to the needs of students and the learning context in early childhood education institutions.

ACKNOWLEDGMENTS

The author would like to express his deepest gratitude to the academic supervisors/advisors at Pacitan for the guidance, input, and support provided during the research process. The direction and motivation provided are very helpful to the author in completing this research. The author also expressed his appreciation to the head of RA Nurrohman Donorojo and the teachers and children of Group B2 who have participated and supported the implementation of this research. Without the cooperation and assistance of various parties, this research would not be able to be carried out properly. Finally, the author would like to thank all parties who have contributed, both directly and indirectly, to the success of this research.

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