
The PNS Model and MASILA Media as a Learning Innovation to Improve Elementary School Students' Communication and Collaboration Skills

Siti Fatimah¹, Diani Ayu Pratiwi^{1*}, and Mohd Kasturi Nor bin Abd Aziz²

¹Department of Elementary School Teacher Education, Faculty of Teacher Training and Education, Lambung Mangkurat University, Indonesia,

²Universiti Malaysia Perlis, Malaysia

*dianipratiwi@ulm.ac.id

Received
16/06/2026

Accepted
25/08/2026

Published
11/10/2026

DOI
[10.59329/gawi.v6i2.370](https://doi.org/10.59329/gawi.v6i2.370)

ABSTRACT

This study aims to improve students' communication and collaboration skills through the implementation of the PNS Model assisted by MASILA Interactive Media in Pancasila Education learning. This study employed Classroom Action Research (CAR) conducted in four meetings involving 10 third-grade students of SDN Pengambangan 10 Banjarmasin. Data were collected through observation and documentation and analyzed descriptively. The results showed that communication skills increased from 20% to 90%, while collaboration skills increased from 30% to 90%. These findings indicate that the PNS Model, which integrates PBL, NHT, and SAVI and is supported by MASILA Interactive Media, was able to create active and collaborative learning. Therefore, the PNS Model assisted by MASILA Interactive Media can be used as an alternative learning innovation to improve students' communication and collaboration skills.

Keywords: *communication skills, collaboration skills, MASILA media, PNS model*

How to cite:

Fatimah, S., Pratiwi, D. A., Aziz, & bin Abd Aziz, M. K. N. (2026). The PNS Model and MASILA media as a learning innovation to improve elementary school students' communication and collaboration skills. *Gawi: Journal of Action Research*, 6(2), 459-471



INTRODUCTION

Education is a process consciously and deliberately designed to develop learners' potential so that they possess the knowledge, skills, and character needed to face various life challenges ([Noorhapizah & Pratiwi, 2021](#)). The development of digital technology has brought education into the Society 5.0 era, which demands the mastery of various 21st-century skills ([Murniyati, 2025](#)). One of the important skills to be developed from elementary school onward is communication and collaboration, since these relate to students' ability to convey ideas, exchange information, respect other people's opinions, and work together to achieve shared goals ([Anggraeni & Habiddin, 2025](#); [Barokah & Untung, 2024](#)). The Merdeka Curriculum gives teachers room to optimize student-centered learning through discussion, problem solving, and group work ([Amanda et al., 2025](#)). One subject that supports the development of communication and collaboration skills is Pancasila Education. This subject focuses not only on mastering knowledge but also on developing students' ability to interact, discuss, work together, respect differences, and resolve problems democratically ([Mihit, 2023](#); [Rose et al., 2024](#)).

The ideal condition for learning Pancasila Education is marked by students' active involvement in discussion, presentation, group work, and problem-solving activities. Through such activities, students have the opportunity to express opinions, give responses, listen to others' ideas, and work together to achieve learning goals ([Zulaidah et al., 2025](#)). Communication skill is the ability to convey ideas, thoughts, information, and opinions clearly and to understand information received from others. According to Aina and Pratiwi ([2025](#)), communication skill is shown through the ability to express oneself, listen effectively, convey information clearly, engage in discussion, and give and receive responses. Collaboration skill, meanwhile, is the ability to work together to achieve shared goals through the division of tasks and responsibilities and mutual respect for each group member's contribution. According to Greenstein, as cited in Aditya and Wahyudi ([2024](#)), collaboration skill is shown through the ability to share knowledge, contribute to problem solving, take responsibility for tasks, and support other group members.

In reality, elementary school students' communication and collaboration skills have not yet developed optimally. Based on initial observations of Pancasila Education learning in a third-grade elementary classroom, some students still lacked confidence in expressing opinions, were unable to articulate ideas clearly, and tended to be passive during discussion. Of 10 students, only about 30% were able to express ideas confidently, while the remaining 70% were still hesitant and rarely gave responses. In terms of collaboration skill, only about 40% of students were able to work together and contribute actively within a group, while the remaining 60% tended to be passive and still preferred to work individually. This condition meant that the learning process had not yet been able to fully develop students' communication and collaboration skills.

Pancasila Education learning should give students broad opportunities to interact, discuss, exchange opinions, and work together to solve various problems. In practice, however, teacher-centered learning is still found, so that students' opportunities to develop communication and collaboration skills remain limited. A learning innovation that can actively involve students is therefore needed. Various studies show that Problem Based Learning (PBL) effectively improves students' communication ability through discussion and problem-solving activities. Numbered Heads Together (NHT) has been shown to improve students' participation and teamwork within groups. Meanwhile, Somatic Auditory Visual Intellectual (SAVI) can improve students' active involvement through learning experiences that engage physical, visual, auditory, and intellectual activity. However, research that integrates all three models to improve communication and collaboration skills in Pancasila Education learning at the elementary level remains limited.

Several previous studies show that Problem Based Learning (PBL) can improve students' communication skills through problem-solving activities ([Annisa et al., 2024](#)), that Numbered Heads Together (NHT) can improve students' participation and teamwork through group learning activities ([Bella et al., 2024](#); [Sopiaturida et al., 2025](#); [Susilawati & Hasibuan, 2024](#)),

and that Somatic Auditory Visual Intellectual (SAVI) can improve students' active involvement through learning experiences that engage somatic, auditory, visual, and intellectual aspects (Sophian et al., 2025). Research on interactive learning media likewise shows that the use of multimedia-based media can support students' engagement and learning experience (Afriyuni et al., 2024; Fatimah & Sari, 2025). These findings show that PBL, NHT, SAVI, and interactive media each have potential for supporting students' skills and engagement, but none of these studies has yet shown the three learning models integrated with interactive media within a single sequence of Pancasila Education learning to develop communication and collaboration skills simultaneously.

The novelty of this study lies in the application of the PNS Model, which integrates the syntax of PBL, NHT, and SAVI with MASILA Media (Makna Sila Pancasila, or Meaning of the Pancasila Principles) within a single sequence of Pancasila Education learning. This integration is designed so that PBL facilitates problem solving, NHT encourages the participation and responsibility of each group member, and SAVI engages students' somatic, auditory, visual, and intellectual activity. MASILA Media is used to support this process through the presentation of problems, visualization of material, and interactive quizzes. Through this integration, the PNS Model does not merely combine several learning models but unites the function of each model and medium in supporting problem-solving activities, discussion, presentation, reflection, and group work. This study therefore offers a learning design that specifically integrates PBL, NHT, SAVI, and MASILA Media to support the simultaneous development of students' communication and collaboration skills in elementary Pancasila Education.

PBL is a learning model centered on solving real problems related to students' daily lives. It aims to help students develop critical thinking and problem-solving ability and to build knowledge through a process of inquiry. According to Arends (2012), the syntax of PBL comprises five stages: (1) orienting students to the problem, (2) organizing students for study, (3) guiding individual and group investigation, (4) developing and presenting artifacts, and (5) analyzing and evaluating the problem-solving process. Through these stages, students are encouraged to identify problems, search for relevant information, develop alternative solutions, and draw conclusions based on the results of their investigation.

NHT is a cooperative learning model that emphasizes individual responsibility within a group through structured discussion. According to Kagan (1992), the syntax of NHT comprises four stages: (1) numbering, in which each group member is given a number; (2) questioning, in which a question or task is given to the group; (3) heads together, in which the group discusses to find the best answer; and (4) answering, in which a selected group member presents the answer. The application of NHT gives all students the opportunity to participate actively, work together, and take responsibility for the outcome of the group discussion.

SAVI is a learning model that engages the whole of students' potential through physical, auditory, visual, and intellectual activity. According to Meier (2000), SAVI consists of four main components: somatic (learning through movement and physical activity), auditory (learning through listening, speaking, and discussing), visual (learning through observing images, videos, and visual media), and intellectual (learning through thinking, analyzing, and solving problems). Engaging multiple senses in learning makes the learning experience more meaningful and increases students' active participation.

Building on the strengths of each model, this study integrates the syntax of PBL, NHT, and SAVI into the PNS Model. This integration is intended to optimize problem-solving activities, group discussion, presentation, reflection, and students' active involvement throughout the learning process. The integration of the three models is presented in Table 1.

Table 1. Integration of PBL, NHT, and SAVI Syntax in the PNS Model

PNS Model Stage	PBL	NHT	SAVI
Conveying objectives	-	-	Auditory
Presenting a problem through MASILA Media	Problem Orientation	-	Visual and Auditory

PNS Model Stage	PBL	NHT	SAVI
Forming groups and assigning numbers	Organizing students	Numbering	-
Distributing the Group Worksheet (LKK)	Organizing students	-	Intellectual
Guiding investigation and discussion	Guiding investigation	Heads Together	Intellectual
Presenting discussion results	Presenting artifacts	Answering	Auditory
Giving appreciation and reinforcing the material	Evaluating results	Answering	Auditory
MASILA interactive quiz	Evaluating problem solving	Heads Together	Somatic, Auditory, Visual, and Intellectual
Concluding the lesson	Evaluating the problem-solving process	-	Intellectual
Reflection and closing	Evaluation	-	Intellectual

MASILA Media (Makna Sila Pancasila) is an interactive medium developed to support Pancasila Education learning. It contains instructional videos, visualizations of the symbols and meaning of the Pancasila principles, learning songs, and interactive quizzes used during group activities. MASILA Media is combined with the PNS Model to create learning that is active, collaborative, and meaningful, thereby supporting the development of students' communication and collaboration skills.

Based on the foregoing, this study aims to describe and analyze the application of the PNS Model and MASILA Media to improve elementary school students' communication and collaboration skills in Pancasila Education learning.

METHOD

This study used Classroom Action Research (CAR) as a means of optimizing Pancasila Education learning through the application of the PNS Model assisted by MASILA Media to improve students' communication and collaboration skills. CAR is a form of reflective research carried out by teachers to continuously improve the quality of the learning process and its outcomes ([Romeli et al., 2023](#); [Utomo et al., 2024](#)). The study was conducted in the third grade of SDN Pengembangan 10 Banjarmasin in the 2025/2026 academic year, with 10 students comprising 7 boys and 3 girls.

The study was conducted in a single cycle consisting of four meetings. Reflection on the results of the action was carried out after each meeting and used as the basis for improving the learning at the next meeting, so that students' communication and collaboration skills could improve progressively.

This study applied a qualitative approach. Data were collected through observation and documentation. Observation was used to obtain data on the development of students' communication and collaboration skills during the learning process. Documentation served as supporting data, comprising evaluation results and records of the learning activities carried out ([Furidha, 2023](#)). The CAR was implemented through four stages (see [Figure 1](#)): planning, action, observation, and reflection ([Kemmis et al., 2014](#)).

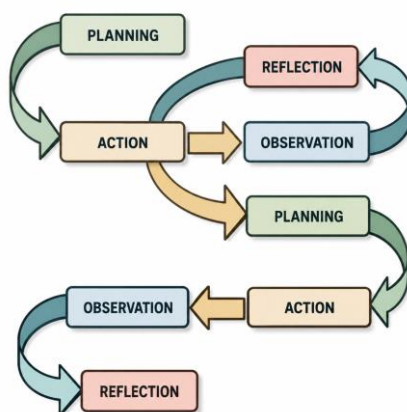


Figure 1. Research Flow

The learning in this study was implemented using the PNS Model, an integration of PBL, NHT, and SAVI. The PNS Model was carried out through ten stages: (1) conveying the learning objectives, (2) presenting a problem through MASILA Media, (3) forming groups and assigning head numbers, (4) distributing the Group Worksheet (LKK), (5) guiding group investigation and discussion, (6) facilitating the presentation of discussion results, (7) providing reinforcement of the material, (8) carrying out the MASILA interactive quiz, (9) guiding students in drawing conclusions about the lesson, and (10) carrying out reflection and closing the lesson. Learning was conducted for 2×35 minutes at each meeting, comprising an opening, a main activity, and a closing.

The time allocation for learning was 2×35 minutes at each meeting, consisting of a 10-minute opening activity, a 50-minute main activity, and a 10-minute closing activity. During the main activity, each stage of the PNS Model was carried out in sequence, beginning with presenting the problem, forming groups and assigning numbers, distributing the LKK, investigation and discussion, presenting discussion results, reinforcing the material, the interactive quiz, and ending with reflection. MASILA Media was used in an integrated way throughout these stages: to display a video as a stimulus at the problem-presentation stage, to present material and visualize the meaning of the Pancasila principles at the reinforcement stage, and to provide an interactive quiz at the evaluation stage. MASILA Media was used at every meeting, adapted to the material and problem being studied (see [Table 2](#)).

Table 2. Implementation of the PNS Model Assisted by MASILA Media

PNS Model Stage	Teacher's Role	Student's Role
Conveying the learning objectives	Conveying the learning objectives	Listening to the learning objectives
Presenting a problem through MASILA	Displaying the problem through the medium	Observing and identifying the problem
Forming groups and assigning numbers	Organizing groups	Joining a group
Distributing the LKK	Giving the group task	Understanding the task
Guiding investigation	Guiding discussion	Discussing and completing the task
Presenting discussion results	Facilitating the presentation	Presenting the discussion results
Reinforcing the material	Providing reinforcement	Listening to the explanation
MASILA interactive quiz	Facilitating the quiz	Answering the quiz as a group
Concluding the lesson and doing the evaluation test	Giving the conclusion and directing the evaluation test	Listening, giving the conclusion, and doing the evaluation test
Reflection and closing	Leading the reflection	Sharing reflections

MASILA Media (Makna Sila Pancasila) is an interactive medium used to support Pancasila Education learning. It contains instructional videos, the symbols and meaning of the Pancasila principles, and interactive group quizzes. The medium is used at the problem-presentation stage through instructional video, at the material-reinforcement stage through the presentation of material and visualization of the meaning of the Pancasila principles, and at the evaluation stage through group quizzes. The use of this medium helped increase students' active participation in observing, discussing, and answering questions during learning (see [Figure 2](#)).



Figure 2. Display of MASILA Media

The four stages of CAR were carried out repeatedly at each meeting to produce ongoing improvement in learning (Hikmah & Pratiwi, 2024). The research data comprised qualitative data obtained through observation sheets for communication and collaboration skills, each consisting of five indicators and completed by an observer at every meeting; the observer in this study was the third-grade classroom teacher. The communication indicators covered the ability to express oneself, listen, convey information, engage in discussion, and give and receive responses ([Aina & Pratiwi, 2025](#)). The collaboration indicators covered the ability to share knowledge, contribute to problem solving, take responsibility for tasks, create a comfortable group atmosphere, and motivate other group members ([Greenstein, as cited in Aditya & Wahyudi, 2024](#)). Observation was carried out throughout the learning process. Quantitative data were obtained from individual evaluation results and group tasks to support the observational data on students' skills. The observation instrument was developed based on the communication and collaboration skill indicators used in the study and was reviewed with the supervising lecturer to ensure its alignment with the research objectives. Observation of communication and collaboration skills was conducted directly during the learning process using an observation sheet prepared according to the research indicators. The instrument was developed with reference to the communication and collaboration skill indicators used in the study, in line with the intended measurement objectives.

Observation was scored on a 1-4 scale, with the categories 1 (not yet skilled), 2 (fairly skilled), 3 (skilled), and 4 (highly skilled). The classical percentage was calculated as the number of students reaching the highly skilled category divided by the total number of students, multiplied by 100%. Data were analyzed using descriptive percentage statistics, comparing the results of each meeting to determine the classical improvement in students' communication and collaboration skills. The success indicator for the study was set at $\geq 79\%$ of students reaching the highly skilled category in communication and collaboration skills, and reaching the school's established minimum mastery criterion (KKTP) of ≥ 70 .

RESULTS AND DISCUSSION

Communication Skills

The results of observing students' communication skills during Pancasila Education learning using the PNS Model assisted by MASILA Media at Meetings 1-4 are presented in [Table 3](#) below.

Table 3. Recapitulation of Students' Communication Skills at Each Meeting

Meeting	Communication Skills		
	Number Highly Skilled	Classical Percentage	Criteria
Meeting 1	2	20%	Very Few Students Highly Skilled
Meeting 2	4	40%	A Small Proportion of Students Highly Skilled
Meeting 3	6	60%	Most Students Highly Skilled
Meeting 4	9	90%	Nearly All Students Highly Skilled

As [Table 3](#) shows, students' communication skills improved progressively across the four meetings of the study. At the first meeting, only 2 students (20%) reached the highly skilled category, placing the class in the "very few students highly skilled" criterion. This low initial achievement indicates that students were still at the stage of adapting to the PNS Model and MASILA Media. Some students still lacked confidence in expressing opinions, were unable to articulate ideas clearly, and remained hesitant when giving responses. This condition is consistent with Azzahra et al. (2024), Sudrajat and Hidayati (2025), and Wang (2024), who stated that communication skill relates to the ability to convey ideas, participate in discussion, and build effective interaction.

At the second meeting, communication skills improved to 4 students (40%), meeting the criterion "a small proportion of students highly skilled." This improvement shows that students were beginning to grow accustomed to expressing ideas and exchanging information through group discussion. This finding is supported by Aina and Pratiwi (2025), Arrahman and Pratiwi (2025), and Munawar et al. (2024), who stated that communication skill develops through the activities of expressing oneself, conveying information, giving responses, and building confidence in learning.

Reflection on the previous meeting showed that some students still lacked confidence in expressing opinions and giving responses during discussion. At the next meeting, the teacher therefore provided more intensive guidance, clarified the instructions for group work, and gave students broader opportunities to present the results of their discussions. This improvement in the action helped students participate more actively and speak up more confidently during learning. In addition, the use of instructional video in MASILA Media helped students understand the problem being discussed, making it easier for them to express their ideas and opinions. Group discussion activity through the NHT syntax also gave every student the opportunity to be actively involved in exchanging information and presenting the results of the group discussion.

A more significant improvement occurred at the third meeting, reaching 60%, or 6 students who obtained the highly skilled category. This achievement shows that students were becoming accustomed to the syntax of the PNS Model, which integrates PBL, NHT, and SAVI. Through problem-solving, discussion, and presentation activities, students had broader opportunities to develop their communication skills. This is consistent with Annisa et al. (2024), Liana and Suriansyah (2023), and Putri and Pratiwi (2025), who asserted that PBL, NHT, and SAVI can improve active engagement, the confidence to voice opinions, and students' communication ability.

The highest improvement occurred at the fourth meeting, reaching 90%, or 9 students who achieved the highly skilled category. This result exceeded the established success indicator of $\geq 79\%$ of students reaching the highly skilled category. This success shows that the application of the PNS Model assisted by MASILA Media contributed to improving students' communication skills. The use of instructional video, material visualization, and interactive quizzes in MASILA Media made learning more engaging and encouraged students' active participation. This finding is supported by Afriyuni et al. (2024), Fatimah and Sari (2025), and Firdany and Ringga (2022), who explained that interactive learning and learning experiences engaging multiple senses can improve students' engagement and the quality of their communication.

Collaboration Skills

The results of observing students' collaboration skills during Pancasila Education learning using the PNS Model assisted by MASILA Media at Meetings 1-4 are presented in [Table 4](#) below.

Table 4. Recapitulation of Students' Collaboration Skills at Each Meeting

Meeting	Collaboration Skills		
	Number Highly Skilled	Classical Percentage	Criteria
Meeting 1	3	30%	A Small Proportion of Students Highly Skilled
Meeting 2	5	50%	A Small Proportion of Students Highly Skilled
Meeting 3	7	70%	Most Students Highly Skilled
Meeting 4	9	90%	Nearly All Students Highly Skilled

As the [Table 4](#) above shows, students' collaboration skills improved progressively across the four meetings of the study. At the first meeting, only 3 students (30%) reached the highly skilled category, placing the class in the "a small proportion of students highly skilled" criterion. This low initial achievement indicates that students were still at the stage of adapting to the PNS Model and MASILA Media. Some students still tended to work individually, were less involved in group discussion, and had not yet learned to share tasks and responsibilities optimally. Collaboration is shown through the ability to work together, share knowledge, contribute actively, and take responsibility for achieving group goals ([Aditya & Wahyudi, 2024](#); [Fazhari & Yuniawatika, 2024](#); [Mawarsari & Ratnawati, 2025](#)).

At the second meeting, collaboration skills improved to 5 students (50%), meeting the criterion "a small proportion of students highly skilled." This improvement shows that students were beginning to grow accustomed to working together in groups and to participating in shared tasks. This finding is supported by Bella et al. ([2024](#)), Siburian and Sari ([2025](#)), and Susilawati and Hasibuan ([2024](#)), who explained that cooperative learning can improve students' engagement, responsibility, and teamwork through structured group activities.

Reflection showed that some students had not yet become actively involved in group work and still tended to rely on more dominant peers. At the next meeting, the teacher therefore clarified the division of tasks within groups, increased support during discussion, and encouraged every group member to contribute to completing the task. This improvement in the action helped increase students' participation and responsibility in group activities. In addition, the problem-solving and group discussion activities within the PBL and NHT syntax gave students the opportunity to share ideas, exchange information, and work together to complete tasks. The use of group quizzes in MASILA Media likewise encouraged every group member to help one another and contribute, so that group goals could be achieved together.

A more significant improvement occurred at the third meeting, reaching 70%, or 7 students who obtained the highly skilled category. This achievement shows that students were becoming accustomed to the syntax of the PNS Model, which integrates PBL, NHT, and SAVI. Through problem-solving, group discussion, and presenting the results of their work, students had opportunities to exchange ideas, share responsibility, and complete tasks together. This is consistent with Hendrawati et al. ([2024](#)), Khatimah and Noorhapizah ([2023](#)), and Ningsih and Pratiwi ([2023](#)), who asserted that problem-based, cooperative, and active learning can improve students' interaction and collaboration during learning.

The highest improvement occurred at the fourth meeting, reaching 90%, or 9 students who achieved the highly skilled category. This result exceeded the established success indicator of $\geq 79\%$ of students reaching the highly skilled category. This success shows that the application of the PNS Model assisted by MASILA Media contributed to improving students' collaboration skills. The use of instructional video, visualizations of Pancasila symbols, and group quizzes in MASILA Media encouraged students to discuss with one another, share tasks, and work

together to achieve group goals. This finding is supported by Anggreni et al. (2022) and Sophian et al. (2025), who stated that students' active involvement in learning can improve teamwork, participation, and responsibility within a group.

Trend Analysis of Communication and Collaboration Skills

The trend analysis of communication and collaboration skills reveals a rich and informative pattern of development. Figure 3 below presents both skills side by side, together with the percentage difference and the status of the success indicator at each meeting.

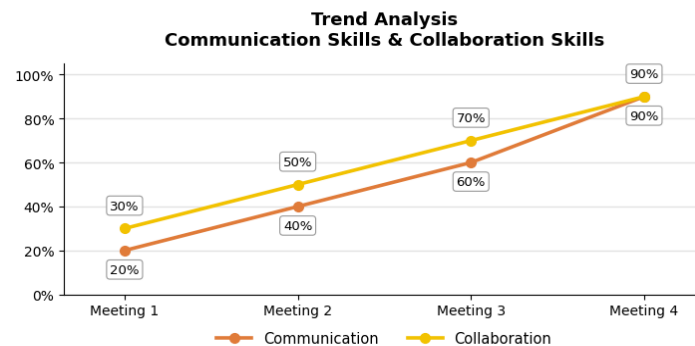


Figure 3. Trend Analysis of Communication Skills and Collaboration Skills

Based on the trend analysis, students' communication and collaboration skills showed positive development throughout the learning process. This improvement indicates that students became increasingly accustomed to expressing opinions, giving responses, listening to peers' ideas, and working together to complete group tasks. This change shows that students were no longer passive recipients of information but had begun to be actively involved in the learning process through discussion, presentation, and problem-solving activities. Learning thus focused not only on mastering the material but also on developing the social skills needed in daily life.

This improvement also shows that the application of the PNS Model assisted by MASILA Media was able to create a more meaningful learning experience. Through problem-solving, group discussion, presentation, and interactive quiz activities, students had the opportunity to interact, exchange information, and take responsibility for group tasks. This condition helped students build confidence in communicating and improve their ability to work together with peers. The development of communication and collaboration skills observed at each meeting therefore reflects a change in students' learning behavior toward being more active, participatory, and collaborative in Pancasila Education learning.

LIMITATIONS AND IMPLICATIONS

This study has limitations in that it involved only 10 students in a single class, so the results cannot be broadly generalized. In addition, the study was conducted over four meetings, so the observed improvement in communication and collaboration skills does not yet reflect the long-term impact of applying the PNS Model assisted by MASILA Media.

The results have practical implications, indicating that the PNS Model assisted by MASILA Media can be used as an alternative learning innovation in Pancasila Education to create learning that is more active, collaborative, and meaningful. The integration of the PBL, NHT, and SAVI syntax, supported by interactive media, helps improve students' participation in discussion, presentation, and group work activities.

Future research is recommended to involve a larger number of subjects and a longer implementation period, and to test the application of the PNS Model assisted by MASILA Media on different material and educational levels, in order to obtain a more comprehensive picture of the development of students' communication and collaboration skills.

CONCLUSION

The application of the PNS Model and MASILA Media as a learning innovation in the Pancasila Education subject showed an improvement in elementary school students' communication and collaboration skills. Communication skills improved from 20% at the first meeting to 90% at the fourth meeting, while collaboration skills improved from 30% to 90%. This improvement shows that the integration of Problem Based Learning (PBL), Numbered Heads Together (NHT), and Somatic Auditory Visual Intellectual (SAVI), supported by MASILA Media, helped create learning that was active, interactive, and meaningful. Through problem-solving, discussion, presentation, and interactive quiz activities, students had the opportunity to express ideas, exchange information, work together, and participate actively in learning. The PNS Model and MASILA Media can therefore be used as an alternative learning innovation to support the development of elementary school students' communication and collaboration skills in Pancasila Education.

CONFLICTS OF INTEREST

The authors declare that there is no conflict of interest.

AUTHOR CONTRIBUTIONS STATEMENT

Conceptualization, S.F. and D.A.P.; methodology, S.F.; validation, M.K.N.A.A.; formal analysis, S.F.; investigation, S.F.; writing, original draft preparation, S.F.; writing, review and editing, D.A.P. and M.K.N.A.A.; supervision, D.A.P. All authors have read and approved the final version of the manuscript.

AI DISCLOSURE STATEMENT

The authors declare that no artificial intelligence (AI) tools or services were used in the preparation, writing, analysis, or development of this manuscript. The manuscript was prepared and reviewed entirely by the authors, who take full responsibility for its content and accuracy.

ACKNOWLEDGMENTS

The authors would like to express their sincere gratitude to the principal, teachers, and staff of SDN Pengembangan 10 Banjarmasin for granting permission and providing support during the implementation of this classroom action research. The authors also extend their sincere appreciation to the third-grade students for their active participation, cooperation, and enthusiasm throughout the learning activities. Their support and participation greatly contributed to the successful completion of this research.

FUNDING

This research received no external funding.

REFERENCES

- Aditya Umni Bunga, & Wahyudi. (2024). Implementasi Teams Games Tournament Untuk Meningkatkan Keterampilan Kolaborasi Peserta Didik Kelas Sekolah Dasar. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 14, 88–97.
- Afriyuni, Y. D., Ramadhan, I., Aulia, F., Febriyanto, B., Saputra, D. S., Yuliati, Y., & Nurhidayat, E. (2024). Improving Motivation and Learning Outcomes of Elementary School Students with Multimedia-Based Interactive Media. *Profesi Pendidikan Dasar*, 2021, 197–210. <https://doi.org/10.23917/ppd.v11i3.5761>
- Aina, A., & Pratiwi, D. A. (2025). Meningkatkan Keterampilan Komunikasi dan Motivasi Menggunakan Model Barasih dan Media Kahoot di SDN Telawang 3 Banjarmasin. *Jurnal Pendidikan, Sains Dan Teknologi*, 4(1), 15–26. <https://doi.org/10.47233/jpst.v4i1.2512>
- Amanda, N., Dewi, R. S., & Syachruroji, A. (2025). Strategi Meningkatkan Keterampilan Komunikasi Peserta Didik Melalui Model Pembelajaran Kooperatif pada Pembelajaran IPAS di MI Miftahul Ulum Serpong Utara. *CJPE : Cokroaminoto Juornal of Primary Education*,

- 8, 801–816. <https://doi.org/10.30605/cjpe.8.2.2025.5978>
- Anggraeni, P. D., & Habiddin, H. (2025). *Studi Literatur Peningkatan Keterampilan Komunikasi Dan Kolaborasi Siswa Melalui Pendekatan Tarl Pada Pembelajaran IPA*. 5(4). <https://doi.org/10.17977/um063.v5.i4.2025.3>
- Anggreni, I. G. A. S., Wiarta, I. W., & Semara Putra, D. K. N. (2022). Pengaruh Model Pembelajaran (SAVI) Berbasis (TIK) Terhadap Kompetensi Pengetahuan Matematika. *Jurnal Pedagogi Dan Pembelajaran*, 3(1), 15. <https://doi.org/10.23887/jp2.v3i1.24357>
- Annisa, Dwi, Annisa, & Muhsinah. (2024). Peningkatan Motivasi dan Karakter WASAKA Menggunakan Model Problem Based Learning dan Think Pair and Share Terintegrasi STEM Muatan IPA. *Journal of Education Research*, 5(3), 3449–3459. <https://doi.org/10.37985/jer.v5i3.1389>
- Arends, R. I. (2012). *Learning to Teach* (9th Editio). McGraw-Hill.
- Arrahman, T., & Pratiwi, D. A. (2025). Model PRO GAME Berbantuan Wordwall dan Quizizz : Strategi Meningkatkan Keterampilan Komunikasi dan Kerjasama. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, 10. <https://doi.org/10.23969/jp.v10i2.27205>
- Azzahra, N., Putri, A., & Khoirunnisa, P. (2024). Peranan Guru Dalam Menghadapi Perkembangan Teknologi Informasi Melalui Pendidikan Abad 21: Pendekatan Kualitatif Tinjauan Pustaka. *JIPSD: Jurnal Inovasi Pendidikan Sekolah Dasar* 1(1), 56–72. <https://journal.innoscientia.org/index.php/jipsd/article/view/129>
- Barokah, N., & Untung, S. (2024). Pemanfaatan Teknologi Digital untuk Meningkatkan Keterampilan Kolaborasi dan Komunikasi Siswa Sekolah Dasar. *Dinamika Pembelajaran : Jurnal Pendidikan Dan Bahasa*, 4, 347–356. <https://doi.org/10.62383/dilan.v1i4.883>
- Bella, B., Istikomayanti, Y., & Lathifah, A. S. (2024). Numbered Heads Together Cooperative Learning in Learning Collaboration and Communication Skills Based on Lesson Study Activities. *Tarbiyah : Jurnal Ilmiah Kependidikan*, 13(1), 17–26. <https://doi.org/10.18592/tarbiyah.v13i1.10999>
- Fatimah, & Sari, Y. I. (2025). Merekonstruksi pembelajaran IPS: media interaktif, gaya belajar siswa, dan kreativitas guru dalam menumbuhkan pemahaman kontekstual. *Dinamika Sosial: Jurnal Pendidikan Ilmu Pengetahuan Sosial*, 4. <https://doi.org/10.18860/dsjpips.v4i2.17921>
- Fazhari, B. A., & Yuniawatika, Y. (2024). Keterampilan Kolaborasi Peserta Didik Kelas V SD dalam Kegiatan Diskusi Kelompok. *Journal of Innovation and Teacher Professionalism*, 3(2), 317–324. <https://doi.org/10.17977/um084v3i22025p317-324>
- Firdany, & Ringga, B. (2022). Pengaruh Model Pembelajaran SAVI terhadap Hasil Belajar Luas dan Keliling Bangun Datar Siswa Kelas IV SDN 1 Wonorejo. *JPG: Jurnal Pendidikan Guru*, 3(4), 247. <https://doi.org/10.32832/jpg.v3i4.8165>
- Furidha, B. W. (2023). Comprehension of the Descriptive Qualitative Research Method: A Critical Assessment of the Literature. *CITYA WISESA: Journal of Multidisciplinary Research*, 2(4). <https://doi.org/10.56943/jmr.v2i4.443>
- Hendrawati, R., Winanto, A., & Kristanti, H. S. (2024). Upaya Peningkatkan Collaboration Skills Peserta Didik SD Melalui Penerapan Project Based Learning (PjBL). *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 14(01), 1–7. <https://doi.org/10.24246/j.js.2024.v14.i01.p1-7>
- Kagan, S. (1992). *Cooperative Learning* (1st ed.). Kagan Publishing.
- Kemmis, Stephen and McTaggart, R. and N., & Rhonda. (2014). *The Action Research Planner: Doing Critical Participatory Action Research* (Revised). Springer Singapore. <https://doi.org/10.1007/978-981-4560-67-2>
- Khatimah, H., & Noorhapizah. (2023). Meningkatkan Keterampilan Berpikir Kritis Dan Kerjasama Siswa Menggunakan Model Pantas DI SD. 01(01), 189–194.
- Liana, N., & Suriansyah, A. (2023). Meningkatkan Aktivitas Dan Hasil Belajar Muatan Ips Menggunakan Model Pintar Pada Siswa Kelas IV. *Jurnal Pendidikan Sosial Dan Konseling*, 1(3), 755–764. <https://doi.org/10.47233/jpdsk.v1i2.15>
- Mawarsari, L. C., & Ratnawati, N. (2025). Implementasi Model TGT Berbantuan Media Tabok Lebah pada Pembelajaran IPS untuk Meningkatkan Keterampilan Kolaborasi Siswa. 9(2),

- 75–83. <https://doi.org/10.23887/pips.v9i2.5169>
- Meier, D. (2000). *The Accelerated Learning Handbook: A Creative Guide to Designing and Delivering Faster, More Effective Training Programs*. McGraw-Hill.
- Mihit, Y. (2023). Dinamika dan Tantangan dalam Pendidikan Pancasila di Era Globalisasi: Tinjauan Literatur. *EDUCATIONIST: Journal of Educational and Cultural Studies*, 2023(1), 357–366.
- Munawar, M. H., Suriansyah, A., & Purwanti, R. (2024). Meningkatkan Aktivitas Belajar dan Keterampilan komunikasi Menggunakan Model PANDIR. *Didaktik : Jurnal Ilmiah PGSD FKIP Universitas Mandiri*, 3(9), 2657–2668. <https://doi.org/10.36989/didaktik.v10i3.3561>
- Murniyati, S. (2025). Transformasi Pendidikan : Kebutuhan dan Tantangan Kompetensi Guru dalam Menghadapi Era Digital Abad-21. *JANACITTA : Journal of Primary and Children's Education*, 8(September), 359–367. <https://doi.org/10.35473/janacitta.v8i2.4197>
- Ningsih, D. A., & Pratiwi, D. A. (2023). Implementasi Model GEMA untuk Meningkatkan Berpikir Kritis Siswa Sekolah Dasar. *Pendidikan Dasar Dan Sosial Humaniora*. <https://doi.org/10.53625/jpdsh.v2i10.6448>
- Noorhapizah, & Pratiwi, D. A. (2021). Pengembangan Bahan Ajar Berbasis Keterampilan Revolusi Industri 4.0, Multiple Intelligence Dengan Muatan Lingkungan Lahan Basah Dan Kearifan Lokal Masyarakat Kalimantan Selatan. In *Universitas Lambung Mangkurat* (Vol. 1).
- Putri, M. E., & Pratiwi, D. A. (2025). *Model Suramadu dengan Integrasi Nearpod dan Estafet Nusantara : Upaya Peningkatan Keterampilan Berpikir Kreatif dan Kolaboratif*. 10(September).
- Romeli, A., Kholis, N., & Riad, A. (2023). Signifikansi Penelitian Tindakan Kelas Bagi Guru dalam Proses Pembelajaran di SMPN 8 Tenggarong. *Ilmiah Pengkajian Dan Penelitian Pendidikan Islam*, 42–50. <https://doi.org/10.53640/azkiya.v6i1.1727>
- Rose, L. F., Syahri M, N., & Puspa, D. (2024). Implementasi Model Pembelajaran Inovatif sebagai Penguatan Kompetensi Siswa Abad 21 Mata Pelajaran Pendidikan Pancasila. *Jurnal Civic Hukum*, 9(3), 40–52.
- Siburian, J., & Sari, P. I. P. (2025). *Penerapan model kooperatif numbered heads together (nht) untuk meningkatkan partisipasi siswa dalam pembelajaran pak*. 32(3), 167–186.
- Sophian, Hidayah, S. K. and, Fia, R. R. and, Safitri, A. and, Suryanda, D. and, & Ade. (2025). Model Pembelajaran SAVI (Somatic, Auditory, Visualization, dan Intellectually) untuk Meningkatkan Hasil Belajar Siswa. *DIAJAR: Jurnal Pendidikan Dan Pembelajaran*. <https://doi.org/10.54259/diajar.v4i1.2751>
- Sopiaturida, S., Hummaira, S. T., Sulistiawati, Roji, M. A., Sunisti, E., & Setiani, H. (2025). Penerapan Model Pembelajaran Diskusi Untuk Meningkatkan Aktivitas dan Pemahaman Siswa dalam Pembelajaran IPAS di SDN Bendungan 1 Cilegon. *Sulawesi Tenggara Educational Journal*. <https://doi.org/10.54297/seduj.v5i2.1236>
- Sudrajat, A. A., & Hidayati, N. (2025). Membangun Keterampilan Komunikasi Peserta Didik Madrasah : Eksplorasi Pelibatan Kegiatan Muhadharah dalam Proses Pembelajaran. *Jurnal Pendidikan Agama Islam Al-Thariqah*, 10(2). [https://doi.org/10.25299/al-thariqah.2025.vol10\(2\).25305](https://doi.org/10.25299/al-thariqah.2025.vol10(2).25305)
- Susilawati, & Hasibuan, A. (2024). Enhancing Student Learning Outcomes through Collaborative Learning: A Classroom Action Research using Numbered Head Together (NHT) Model in Elementary Science Education. *Jurnal Pendidikan Tambusai*, 8. <https://doi.org/10.31004/jptam.v8i1.13405>
- Utomo, P., Asvio, N., & Prayogi, F. (2024). Metode Penelitian Tindakan Kelas (PTK): Panduan Praktis untuk Guru dan Mahasiswa di Institusi Pendidikan. *Pubmedia Jurnal Penelitian Tindakan Kelas Indonesia*, 1(4), 19. <https://doi.org/10.47134/ptk.v1i4.821>
- Wang, H. (2024). The Impact of Communication Skills on Work Performance in Team Collaboration. *Advances in Economics, Management and Political Sciences*, 121(1), 99–106. <https://doi.org/10.54254/2754-1169/121/20242359>
- Zulaidah, I., Kirani, S., & Sari, C. K. (2025). Penguatan Profil Pelajar Pancasila melalui

Pembelajaran Berbasis Keterampilan Abad ke-21. *EducanduM: Jurnal Manajemen Pendidikan*, Vol. 18, N, 21–24. <https://doi.org/10.24114/em.v18i1.65752>