
Articulate Storyline-Based NALAR Learning Model Innovation for Improving Elementary Students' Listening and Collaboration Skills

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Received
16/06/2026

Accepted
25/08/2026

Published
11/10/2026

DOI
[10.59329/gawi.v6i2.371](https://doi.org/10.59329/gawi.v6i2.371)

ABSTRACT

This study aims to describe the improvement of listening and collaboration skills of fifth-grade students at SDN Banua Anyar 3 Banjarmasin through the implementation of the NALAR learning model based on Articulate Storyline media. The NALAR model (Need Identification, Analyze Individually, Learn Collaboratively, Acquire Concepts, and Reflect and Reason) is a synergistic combination of Problem-Based Learning, Think Pair Share, and Discovery Learning, encompassing ten sequential instructional steps. This Classroom Action Research (CAR) study was conducted over four meetings with 10 students as research subjects. Data were collected using observation sheets with seven listening skill indicators and five collaboration indicators, scored on a four-point rubric by two observers. Results indicate that listening skills improved from 30% to 80%, while collaboration skills improved from 40% to 90%, both surpassing the $\geq 80\%$ classical mastery criterion. It is concluded that the Articulate Storyline-based NALAR model contributed to the improvement of listening and collaboration skills within this classroom context.

Keywords: *articulate storyline, classroom action research, collaboration, listening skills, NALAR model*

How to cite:

Julia, R., Pratiwi, D. A., Harun, M. (2026). Articulate storyline-based NALAR learning model innovation for improving elementary students' listening and collaboration skills. *Gawi: Journal of Action Research*, 6(2), 447-458



INTRODUCTION

Education is a systematic process aimed at developing students' potential comprehensively, including knowledge, skills, attitudes, and character values, in order to prepare adaptive and competitive human resources for the Society 5.0 era. Educational processes therefore need to extend beyond academic attainment to strengthen critical thinking, creativity, collaboration, and the responsible use of technology (Fauzi et al., 2023; Ubaidillah et al., 2024). These twenty-first-century competencies should be integrated into learning from the elementary level so that students develop a strong foundation for responding to global challenges (Fauzi & Nizmatul, 2023; Huda & Aslamiah, 2024).

Indonesian language learning in elementary school has a strategic role in developing students' communication abilities, particularly listening and collaboration. Listening is the first language skill acquired by humans and provides a foundation for the development of other language skills (Amalia et al., 2021; Ubaidillah et al., 2024). Listening involves more than the physical act of hearing; it also requires cognitive processes through which learners understand, interpret, and evaluate received messages (Fadhilah et al., 2025; Nisa & Amalia, 2024). Indicators of listening skills include maintaining full attention to the speaker, identifying main ideas, understanding meaning, restating information, answering questions, recalling key points, and responding to the content of the material (Amaliana & Efendi, 2025; Putu et al., 2025). Numerous studies have sought to improve listening skills, but most have focused on a single medium or method, such as animated video (Anugrah et al., 2024), digital storytelling (Masykur et al., 2025), or storytelling methods (Baitullah et al., 2025). Research examining learning media that simultaneously supports both listening and collaboration remains limited.

In addition to listening, collaboration is an essential twenty-first-century competency that should be cultivated from an early age. Collaboration refers to the ability of two or more individuals to work together through shared roles and responsibilities in order to develop a common understanding of a problem (Fauzi & Nizmatul, 2023; Huda & Aslamiah, 2024). Collaborative activities train students to participate actively, respect others' perspectives, and develop collective thinking (Pratiwi & Arrahman, 2025). Five indicators of collaboration are used in this study: (1) working effectively and respectfully with others; (2) accepting and understanding differences; (3) willingness to provide mutual assistance; (4) communicating in pursuit of shared goals; and (5) assuming responsibility for and contributing to group work (Dhitasarifa et al., 2023). Existing studies of collaboration or listening skills have generally focused on a single learning model, including Project-Based Learning (Mona et al., 2023), the SPIRIT model (Sitompul & Pratiwi, 2023), and the PITA model (Aslamiah et al., 2024). Combinations of complementary instructional models therefore remain comparatively underexplored.

The NALAR model developed in this study is an acronym for Need Identification, Analyze Individually, Learn Collaboratively, Acquire Concepts, and Reflect and Reason. It synergistically integrates three instructional models, Problem-Based Learning (PBL), Think Pair Share (TPS), and Discovery Learning (DL), into ten sequential steps designed to create active, meaningful, and coherent learning. The integration is intended to offset the limitations of each model: PBL provides authentic problem contexts that stimulate attentive listening, TPS establishes a structured collaborative environment, and DL promotes independent exploration that deepens understanding. Fauzi et al. (2024) showed that problem-based learning can progressively strengthen students' collaboration skills. Although combinations of two instructional models have been implemented, such as PBL and TPS to improve junior-high-school students' creative thinking (Darwis et al., 2025), the integration of three models within a single instructional sequence, particularly at the elementary level, remains relatively uncommon.

In this study, the NALAR model was integrated with Articulate Storyline as the primary medium for delivering instructional content. Articulate Storyline is software for developing interactive learning media accessible through smartphones and laptops and capable of integrating audio, video, animation, and quizzes within a single platform (Gafelina & Subagyo, 2025). Interactive media can provide students with opportunities for repeated and independent learning, thereby supporting their ability to understand spoken information (Legina & Sari, 2022; Randitha

[Missouri et al., 2025](#)). Utari and Ramadan ([2023](#)) confirmed the feasibility of Articulate Storyline for interactive elementary learning. Nevertheless, studies using Articulate Storyline in elementary schools remain limited in several respects. Many are development studies focused on a single subject, such as Islamic Religious Education ([Ardiawan et al., 2024](#)), or develop the medium without integrating it with an instructional model ([Husain & Ibrahim, 2021](#)). Other studies have been conducted at the junior-high-school level ([Agustina et al., 2022](#)). Studies combining Articulate Storyline with a learning model, such as PBL ([Aulia & Desyandri, 2025](#)), generally employ only one model. Research integrating multiple models and interactive media to develop listening and collaboration simultaneously has not been widely reported.

Initial observations and an interview with the fifth-grade classroom teacher on January 7, 2026, indicated that six of the 10 fifth-grade students (60%) at SDN Banua Anyar 3 Banjarmasin had not yet demonstrated adequate listening skills. Difficulties included understanding spoken texts, answering questions based on information heard, and maintaining attention during listening activities. In addition, five students had not demonstrated optimal collaboration, as reflected in limited participation in group work and reluctance to discuss ideas with peers. This condition is consistent with Munthe et al. ([2023](#)), who identify limited variation in instructional methods and media as a factor associated with weak listening performance in elementary schools. Accordingly, this study aimed to describe the improvement of listening and collaboration skills through an Articulate Storyline-based NALAR model among fifth-grade students at SDN Banua Anyar 3 Banjarmasin.

METHOD

This study employed Classroom Action Research (CAR) with a qualitative orientation. CAR is a form of practical inquiry intended to improve classroom learning through recurring cycles of action and reflection ([Azizah & Fatamorgana, 2021](#)). The research design followed Kemmis et al. ([2014](#)), comprising four stages: planning, action, observation, and reflection. The qualitative orientation was used to describe how the learning process unfolded and how students' skills developed across the action sequence.

The study was conducted in a fifth-grade class at SDN Banua Anyar 3 Banjarmasin, located at Jl. 9 Nopember No. 22, Banua Anyar, East Banjarmasin District, during the second semester of the 2025/2026 academic year. The participants were 10 students, comprising six boys and four girls. The action was implemented over four meetings of 2×35 minutes each and focused on Chapter 8 of Indonesian Language learning, 'Writing a Speech Script.' This topic was relevant to both study variables because (1) listening to model speeches through Articulate Storyline directly engaged the seven listening indicators, and (2) collaboratively composing a speech activated the five collaboration indicators through role distribution, content discussion, and joint presentation.

Data were collected using observation sheets for listening skills (seven indicators) and collaboration skills (five indicators). Each indicator was assessed using a four-point rubric: 1 (low), 2 (fair), 3 (skilled), and 4 (highly skilled). A student was categorized as highly skilled when the mean score across all indicators within a skill domain was ≥ 3.5 . Before implementation, the observation instruments were reviewed through expert judgment by an academic supervisor from the Elementary School Teacher Education Program and a fifth-grade classroom teacher at SDN Banua Anyar 3 Banjarmasin. The review considered indicator relevance, content appropriateness, clarity of language, and observability. Reviewer feedback was used to revise the instruments before data collection. During the action, observations were conducted by two observers: the researcher and the classroom teacher. To promote rating consistency, both observers used the same instrument and rubric and calibrated their interpretations before observation. Any differences in ratings were resolved through discussion with reference to the predefined indicators. The listening-skills rubric is presented in [Table 1](#) and the collaboration-skills rubric in [Table 2](#).

Table 1. Listening Skills Assessment Rubric

Indicator	Score 4 (Highly Skilled)	Score 3 (Skilled)	Score 2 (Fair)	Score 1 (Low)
Sustained attention to the speaker	Consistently attends to the speaker, avoids distracting activities, maintains	Attends to the speaker well and demonstrates most aspects of sustained	Maintains attention during only part of the listening activity, is	Shows limited attention during listening, frequently

Indicator	Score 4 (Highly Skilled)	Score 3 (Skilled)	Score 2 (Fair)	Score 1 (Low)
Identifying the main idea	appropriate eye contact and attentive body posture, and accurately captures important information. Accurately identifies the main idea, distinguishes it from supporting information, restates it in their own words, and records key points appropriately.	attention, but occasionally loses concentration or misses important information. Correctly identifies and communicates most main ideas but is less complete in distinguishing or recording important supporting information.	frequently distracted, and captures only some of the information presented. Identifies only some main ideas and still has difficulty distinguishing them from supporting information.	engages in other activities, and is unable to capture the information presented. Has difficulty identifying and restating the main idea of the information heard.
Understanding meaning	Explains the content in context, interprets meaning accurately, answers content-based questions, and summarizes the main message clearly in their own words.	Understands most of the content and explains its meaning well, with only minor errors in interpretation or summary.	Understands part of the content, but explanations and interpretations are incomplete or insufficiently accurate.	Has difficulty understanding the content and meaning of the information presented.
Restating information	Restates information coherently in their own words, reproduces key points, preserves the original meaning, and accurately reinforces the content.	Restates most information coherently, but omits or inaccurately conveys some important information.	Restates only a small portion of the information, with unclear sequencing or content.	Can restate only a very limited portion of the information heard and does so unclearly.
Answering questions	Answers all questions in accordance with the information heard using clear, accurate, on-topic responses in oral or written form.	Answers most questions correctly and clearly, although some responses are slightly inaccurate or incomplete.	Answers only some questions correctly and several responses do not adequately correspond to the information heard.	Can answer some simple questions but has difficulty providing accurate responses based on the information heard.
Recalling key points	Recalls all major points, presents the core information in sequence, connects key points with the explanation received, and restates them accurately.	Recalls and presents most key points in a reasonably coherent sequence, although some information is omitted.	Recalls only a small number of key points, resulting in an incomplete and poorly sequenced account.	Recalls very few key points, and the information presented is neither coherent nor complete.
Providing evaluative responses	Expresses an opinion, provides relevant comments, offers judgments supported by logical reasons, and responds to peers or the teacher politely and constructively.	Provides relevant responses and comments with reasonably clear reasons, although the evaluation is not consistently in-depth.	Provides general or less relevant responses, with reasons that are insufficiently logical or supportive of the stated opinion.	Provides only simple responses to the material; comments or evaluations remain weakly relevant and unsupported by clear reasons.

Table 2. Collaboration Skills Assessment Rubric

Indicator	Score 4 (Highly Skilled)	Score 3 (Skilled)	Score 2 (Fair)	Score 1 (Low)
Working effectively and respectfully with others	Participates actively, respects each member's contribution, communicates politely without dominating, and proactively helps peers achieve shared goals.	Participates actively, respects each member's contribution, and communicates politely without dominating, but is less proactive in helping peers achieve shared goals.	Begins to participate in group work, respects peers' contributions, and communicates appropriately, but inconsistently supports progress toward shared goals.	Participates minimally, shows limited respect for members' contributions, and still requires guidance to cooperate toward shared goals.
Accepting and understanding differences	Listens without interrupting, remains open to diverse ideas, respects differences, and adapts effectively when working with peers who hold different perspectives.	Listens without interrupting, remains open to diverse ideas, and respects differences, but adapts less effectively to peers with different perspectives.	Begins to accept peers' opinions and respect differences but remains insufficiently open to diverse ideas and inconsistent in adapting within the group.	Is reluctant to accept peers' opinions, remains closed to alternative ideas, and requires guidance to respect differences within the group.
Willingness to help one another	Responds to peers who experience difficulty, takes initiative to offer assistance, actively shares information, and cooperates to support group success.	Helps peers who experience difficulty, offers assistance, and shares information, but is less active in	Begins to help peers and share information but shows limited initiative and inconsistent support for group success.	Shows limited concern for peers experiencing difficulty and requires guidance to share information and

Indicator	Score 4 (Highly Skilled)	Score 3 (Skilled)	Score 2 (Fair)	Score 1 (Low)
Communicating toward shared goals	Communicates ideas clearly, listens empathetically to peers, uses respectful language, and actively helps build agreement during group discussion.	Communicates ideas clearly, listens to peers, and uses respectful language, but is less active in building group agreement.	Begins to express opinions and listen to peers, but communication is inconsistent and contributes only minimally to group agreement.	Rarely expresses opinions or listens to peers and requires guidance to communicate effectively in group discussion.
Assuming responsibility and contributing to group tasks	Performs the assigned role consistently, completes tasks seriously and on time, makes a substantive contribution, and assumes responsibility for the group's work.	Performs the assigned role, completes tasks seriously and on time, and contributes to the work, but shows less responsibility for the overall group outcome.	Begins to perform assigned roles and complete tasks, but contribution and responsibility for the group outcome remain inconsistent.	Inconsistently performs assigned roles and completes tasks and requires guidance to increase responsibility and contribution to group work.

RESULTS AND DISCUSSION

The Articulate Storyline-based NALAR model was implemented over four meetings with fifth-grade students at SDN Banua Anyar 3 Banjarmasin. NALAR, Need Identification, Analyze Individually, Learn Collaboratively, Acquire Concepts, and Reflect and Reason, was designed as a synergistic integration of Problem-Based Learning (PBL), Think Pair Share (TPS), and Discovery Learning (DL). To clarify how the model was enacted in classroom practice, the following section describes the operationalization of the ten NALAR instructional steps that guided the intervention.

Operationalization of the NALAR Learning Model Syntax

The NALAR model was operationalized through ten logically sequenced steps that integrate features of PBL, TPS, and DL within three broad phases: independent exploration, collaborative investigation, and validation and reflection. [Table 3](#) presents the operational description of each NALAR stage and its relationship to teacher activities, student activities, the media, and the targeted skills.

Table 3. Syntax of the NALAR Learning Model

NALAR Stage / Phase	Instructional Step	Theoretical Integration (PBL, TPS, DL)	Teacher Activity	Student Activity	Skill Indicator
N – Need Identification	Problem Orientation and Stimulation	PBL: Problem Orientation / DL: Stimulation	Presents a contextual and authentic problem through spoken/visual text in Articulate Storyline.	Listens to an authentic issue as a learning stimulus and records important points.	Listening: attention and identification of main ideas
	Identification of Learning Needs	DL: Problem Statement	Guides students in formulating the problem and identifying what needs to be learned to resolve it.	Independently identifies and formulates information gaps or problems.	Cognitive: identifying the core problem
A – Analyze Individually	Independent Data Exploration	DL: Data Collection	Provides guiding questions and facilitates initial information or literature searches.	Independently searches for and gathers relevant information.	Literacy: selecting valid information
	Solution Analysis (Think)	TPS: Think	Supports individual reasoning as students formulate an initial solution.	Analyzes the information heard to develop an initial individual solution.	Listening: responding to content; critical thinking
L – Learn Collaboratively	Paired Deliberation (Pair)	TPS: Pair	Organizes students in pairs and monitors two-way discussion.	Discusses ideas in pairs, compares perspectives, and integrates initial solutions.	Collaboration: paired communication and respect for differences

NALAR Stage / Phase	Instructional Step	Theoretical Integration (PBL, TPS, DL)	Teacher Activity	Student Activity	Skill Indicator
A – Acquire Concepts	Group Investigation and Processing	PBL: Individual/Group Investigation / DL: Data Processing	Guides pairs or small groups in processing the information collected.	Collaboratively processes information, connects arguments, and develops a final solution.	Collaboration: active role distribution and teamwork
	Construction of the Product	PBL: Developing the Product	Monitors and ensures that each group documents its solution systematically.	Prepares a final report, infographic, or visual aid for presentation.	Collaboration: shared responsibility for the product
	Sharing Ideas (Share)	TPS: Share / PBL: Presenting the Product	Organizes the class forum and facilitates group presentations.	Group representatives present the proposed solution clearly to the class.	Communication : systematic presentation of ideas
	Verification and Conceptual Reinforcement	DL: Verification	Facilitates class questions and answers, confirms accurate understanding, and reinforces key concepts.	Asks questions, listens to counterarguments, and compares group findings with accepted concepts.	Listening: evaluative and objective responses
R – Reflect and Reason	Generalization and Evaluative Reflection	DL: Generalization / PBL: Process Analysis and Evaluation	Addresses misconceptions, guides general conclusions, and facilitates reflection.	Draws general conclusions with the teacher, reflects on the reasoning process, and conducts self-evaluation.	Listening and critical thinking: self-evaluation

This ten-step structure was implemented consistently across all four meetings to stimulate and assess the development of the two primary study variables: students' listening and collaboration skills.

Listening Skills

Fifth-grade students' listening skills showed a consistent increase from the first to the fourth meeting. The class-level percentage was calculated by dividing the number of students with a mean score of ≥ 3.5 across the seven listening indicators by the total number of students (10) and multiplying by 100%. The observation results are presented in [Table 4](#).

Table 4. Summary of Students' Listening Skills by Meeting

Meeting	Student Listening Skills			Criterion
	Number Skilled	Highly	Class-level Percentage	
Meeting 1	3 students		30%	Very few highly skilled
Meeting 2	5 students		50%	A small proportion highly skilled
Meeting 3	8 students		80%	A large majority highly skilled
Meeting 4	8 students		80%	A large majority highly skilled

In the first meeting, only three students (30%) reached the highly skilled category. This low initial level is pedagogically plausible because students were still in an orientation and adaptation phase with both the NALAR model and the newly introduced Articulate Storyline medium. Several students had difficulty maintaining attention to the audiovisual presentation and responding accurately to questions. This condition is consistent with Vygotsky's (1978) concept of the Zone of Proximal Development (ZPD), which emphasizes the need for more intensive scaffolding when learners are first introduced to a new learning approach before they can perform more independently.

In the second meeting, the proportion increased to five students (50%). This improvement suggests that the interactive audiovisual features of Articulate Storyline were beginning to support students' attention and engagement. Inayah et al. (2023) similarly reported that Articulate Storyline-based interactive media can increase students' interest and attention, with potential benefits for listening performance.

Achievement increased to eight students (80%) in the third meeting, thereby meeting the $\geq 80\%$ success criterion. Two factors may help explain this improvement. First, students entered a deeper phase of exploration through the fifth to seventh steps of NALAR, which involve paired and group discussion; these activities allowed students to confirm and deepen their understanding of the information they had heard. Second, three meetings of repeated interaction with Articulate Storyline may have increased students' familiarity with the digital environment, allowing more cognitive resources to be directed toward listening itself. This interpretation is consistent with Nugroho and Arrosyad (2020), who reported meaningful improvement in listening through Articulate Storyline-based interactive multimedia.

In the fourth meeting, the 80% level (eight students) was maintained. This stability suggests that the improvement represented a relatively sustained change in listening performance rather than a temporary fluctuation. The strongest indicators were 'identifying the main idea of spoken information' and 'understanding meaning clearly.' In contrast, 'providing an evaluative response to the content' remained an area requiring further development, as evaluative listening may require longer-term internalization and practice. It should also be noted that the apparent plateau may partly reflect the very small class size: with only 10 students, the two students who had not yet reached the criterion accounted for 20 percentage points and may have required more intensive individual support.

Collaboration Skills

Students' collaboration skills also showed positive improvement. The class-level percentage was calculated by dividing the number of students with a mean score of ≥ 3.5 across the five collaboration indicators by the total number of students (10) and multiplying by 100%. The five indicators were effective and respectful cooperation, acceptance of differences, willingness to help, communication toward shared goals, and responsibility for collective tasks. The results are presented in Table 5.

Table 5. Summary of Students' Collaboration Skills by Meeting

Meeting	Number Highly Skilled	Student Collaboration Skills	
		Class-level Percentage	Criterion
Meeting 1	4 students	40%	A small proportion highly skilled
Meeting 2	5 students	50%	A small proportion highly skilled
Meeting 3	8 students	80%	A large majority highly skilled
Meeting 4	9 students	90%	Almost all students highly skilled

Collaboration began at 40% (four students) in the first meeting. This initial level was higher than that for listening, possibly because collaboration builds on social competencies already used in students' everyday interactions. Indriyani et al. (2021) argue that social interaction involving communication and cooperation contributes to the development of students' social skills. Nevertheless, most students still experienced difficulty with equitable role distribution and productive communication toward group goals, indicating that effective academic collaboration requires a supportive instructional structure.

In the second meeting, collaboration increased to 50% (five students). The Think Pair Share component embedded in the fifth NALAR step began to provide a structured context for paired discussion. Students increasingly practiced exchanging perspectives and developing arguments together. This pattern is consistent with Huda and Aslamiah (2024), who found that collaboration-oriented instructional models can strengthen elementary students' cooperative skills.

A substantial increase occurred in the third meeting, when collaboration reached 80% (eight students) and met the success criterion. This improvement was supported particularly by the seventh NALAR step, which involved small-group discussion to process information collaboratively and complete the Group Worksheet (LKK). The activity directly and systematically engaged all five collaboration indicators. The result is consistent with Fauzi et al. (2024), who found that Problem-Based Learning can develop collaboration through group-based problem solving.

The highest collaboration level was reached in the fourth meeting, when 90% (nine students) were categorized as highly skilled. ‘Working effectively and respectfully with others’ and ‘communicating to achieve shared goals’ were the strongest indicators, each reaching 90%. The continued increase in collaboration in the fourth meeting, in contrast to the plateau in listening, may reflect the cumulative nature of collaborative practice: repeated interaction provides continuing opportunities to exercise each component of collaboration. In addition, the increasingly cohesive group dynamics developed over the previous three meetings may have encouraged students who were initially passive to contribute more actively.

Comparison of Improvements in Listening and Collaboration Skills

A comparative analysis of listening and collaboration reveals several informative developmental patterns. Figure 1 presents the two skill domains side by side, together with the percentage difference and the status of the success criterion at each meeting.

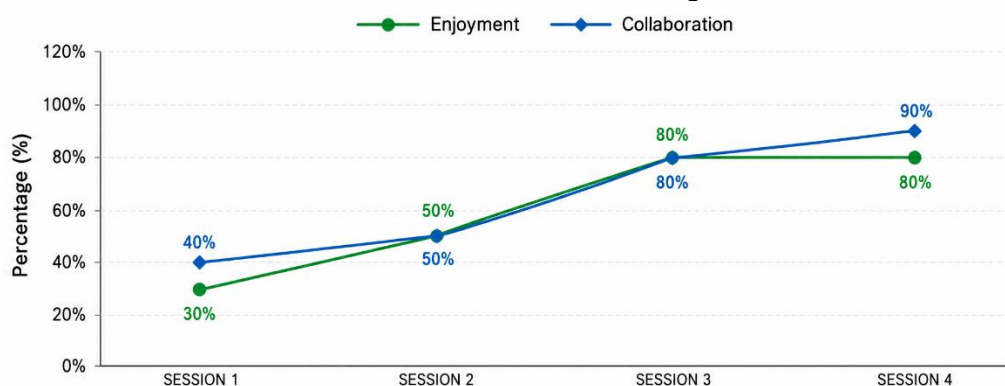


Figure 1. Comparison of listening and collaboration skills across meetings

The comparison reveals several patterns. In the first meeting, collaboration (40%) exceeded listening (30%) by 10 percentage points, suggesting that students' social-interactive competencies were initially more developed than their receptive-cognitive performance in the context of a new learning medium. In the second meeting, both skills converged at 50%, marking a point of equivalence before more substantial learning gains emerged.

The third meeting represented a critical point, as both skill domains reached 80% and met the success criterion simultaneously. This convergence reflects the synergistic design of NALAR: the first through fourth steps primarily stimulate listening, whereas the fifth through eighth steps establish a structured environment for collaboration. The simultaneous achievement suggests that an integrative instructional approach combining interactive media with collaborative learning structures can support more than one skill domain within the same learning sequence.

In the fourth meeting, the trajectories diverged: collaboration continued to increase to 90%, whereas listening remained at 80%. Overall, both domains improved by 50 percentage points (listening from 30% to 80%; collaboration from 40% to 90%). The plateau in listening should not necessarily be interpreted solely as a ceiling effect; it may also have been influenced by a declining novelty effect associated with repeated use of Articulate Storyline, repetition of the instructional procedure, and the very small class size, in which a change in the performance of a single student alters the class-level percentage by 10 points.

Conceptually, the relationship between listening and collaboration in this study appears mutually reinforcing. Students who listen effectively are better positioned to participate productively in group discussion because they have a more accurate understanding of the problem under consideration. Silvia et al. (2025) similarly argue that strong listening skills help students capture and understand information more effectively, thereby facilitating participation in interactive and collaborative problem-solving activities. Conversely, active collaboration provides opportunities to clarify and deepen understanding of information previously heard. Shamsitdinova (2022) explains that collaborative listening can support the development of perception and comprehension through small-group interaction.

These findings are consistent with earlier studies. Pratiwi and Maufikkoh (2025) reported an increase in creative-thinking skills from 12% to 88% and collaborative skills from 46% to 100% using the NALAR model. Pratiwi et al. (2025) reported an increase in collaboration from 48% to 92% through a combination of PBL, TGT, and NHT at SDN Telaga Biru 4 Banjarmasin. However, because the present study used a CAR design without a control group and involved only 10 students, the findings should not be generalized as evidence of universal effectiveness. The observed improvements should be interpreted within the specific classroom context, and further research using stronger comparative designs is needed to confirm the results.

CONCLUSION

The Implementation of the Articulate Storyline-based NALAR learning model was associated with improvement in the listening and collaboration skills of fifth-grade students at SDN Banua Anyar 3 Banjarmasin. The proportion of students categorized as highly skilled in listening increased from 30% in the first meeting to 80% in the fourth meeting, while collaboration increased from 40% to 90%. Both outcomes met or exceeded the class-level success criterion of $\geq 80\%$. The pattern across meetings indicates relatively stable improvement rather than a single isolated fluctuation, as listening was maintained at 80% in the fourth meeting and collaboration continued to increase. Listening and collaboration appeared to reinforce one another. Students who listened effectively were better able to participate productively in group discussion, while active collaboration provided opportunities to clarify and deepen understanding of the information heard. This synergy was supported through two principal mechanisms: Articulate Storyline provided structured audiovisual stimulation for listening, while the staged discussion structure embedded in NALAR created progressively richer opportunities for collaboration. Accordingly, the Articulate Storyline-based NALAR model warrants further development and evaluation as an integrative approach in broader elementary-education contexts.

CONFLICTS OF INTEREST

The authors declare that there is no conflict of interest.

AUTHOR CONTRIBUTIONS STATEMENT

Conceptualization, R.J., D.A.P., and M.H.; methodology, R.J.; formal analysis, R.J.; writing original draft preparation, R.J.; supervision, D.A.P. and M.H.; review and editing, D.A.P. and M.H.

AI DISCLOSURE STATEMENT

The author used Gemini and ChatGPT during the preparation of this work for referencing points of uncertainty and assisting with paraphrasing. After using the tool/service, the author thoroughly reviewed and edited the content as needed and takes full responsibility for the content of the publication.

ACKNOWLEDGMENTS

The authors would like to express our sincere gratitude to our colleagues, lecturers, and experts who provided valuable feedback, insights, and constructive suggestions during the preparation of this manuscript. Their expertise greatly contributed to the improvement of this work.

FUNDING

This research received no external funding.

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