



Developing Teaching Materials with the ADI Model Assisted by Canva to Improve Procedural Text Writing Skills and Self-Confidence

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Abstract

This study aimed to comprehensively examine the development process, feasibility, effectiveness, and implementation constraints of teaching materials based on the Argument-Driven Inquiry (ADI) model assisted by Canva in improving students' procedural text writing skills and self-confidence. This research employed a Research and Development (R&D) method with the stages of needs analysis, design, product development, expert validation, product revision, limited trial, extensive trial, and final product. The results indicated that the development process was conducted in a structured and systematic manner in accordance with the R&D stages. The feasibility of the developed product was categorized as very feasible, as reflected by the average feasibility percentages of 97.07% for teaching materials, 96.19% for student worksheets, 94.67% for learning media, and 96.83% for lesson plans. Effectiveness testing showed a significant improvement in students' procedural text writing skills, indicated by an increase in the mean score from 59.20 in the pretest to 76.85 in the posttest, with an N-Gain value of 0.41 in the moderate category. In addition, students' self-confidence increased significantly from 49.64% in the fair category to 84.22% in the very good category. Implementation constraints included students' need to adapt to the argument construction stage and the necessity for optimal time management by teachers. Overall, the Canva-assisted ADI teaching materials were proven to be feasible, effective, and have strong potential as an innovative alternative for teaching procedural text writing in elementary schools.

Keywords: ADI Model; Canva; Procedural Text; Self-Confidence; Teaching Materials

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INTRODUCTION

Writing skills are a fundamental competency in Indonesian language learning in elementary schools because they play a role in developing coherent, logical, and communicative thinking skills. Students' writing skills still require reinforcement, particularly in texts with a clear procedural structure, such as procedural texts (Devi et al., 2018). Learning that does not incorporate appropriate strategies and media is one factor contributing to students' weak writing skills at the elementary level.

Procedural texts require students to develop systematic steps to achieve specific goals. However, various studies have shown that students' primary difficulties are structuring the sequence of steps, selecting functional vocabulary, and understanding the text's structure as a whole (Kirana et al., 2024). This highlights the need for teaching materials that specifically guide students in developing procedures in a coherent and meaningful manner.

In addition to writing skills, students' *self-confidence* in writing is also low. Studies in elementary schools show that a lack of writing habits, minimal feedback, and a fear of making mistakes make students reluctant to write in class (Rahmawati et al., 2024). Self-confidence has been shown to correlate significantly with the quality of students' writing; the more confident students are, the better the structure and completeness of the texts they produce.

One potential approach to improving writing skills is the Argument-Driven Inquiry (ADI) model. Although initially applied to science education, various studies have shown that ADI can strengthen students' ability to reason, formulate claims, and systematically present written arguments (Hasnunidah et al., 2015). The inquiry- and argumentation-oriented structure of ADI allows students to experience a directed thinking process before writing.

The ADI framework, which requires students to identify problems, make observations, formulate claims, and revise their writing based on feedback, makes it effective for teaching writing, including procedural texts, because these texts also require logical flow, evidence, and responsible step-by-step organization. Recent research shows that implementing ADI in literacy activities can improve reasoning and structured writing skills. (Amelia et al., 2025). This opens up opportunities for the development of ADI-based teaching materials to support the writing of procedural texts.

On the other hand, the use of digital media such as Canva has been shown to increase student motivation to learn, the quality of written products, and their interest in completing writing assignments. As a design platform, Canva enables visual and engaging presentation of information, making it easier for students to understand text structure (Ilham et al., 2022). Canva's integration into language learning has been shown to improve writing skills and student engagement at various levels of education (El-Sherbiny & El-Sherbiny, 2024).

Digital teaching materials utilizing Canva have also been shown to be easier for students to understand because they feature illustrations, icons, and visual flows that guide them in organizing ideas systematically. A development study in elementary schools showed that Canva improved Indonesian language learning outcomes and made it easier for teachers to explain text structure (Fitri & Mudinillah, 2022). Therefore, Canva-based teaching materials are relevant to supporting the need to develop procedural texts with clear steps.

The literature review indicates that good teaching materials must be developed through a research and development (R&D) approach, with expert validation and field trials to ensure their feasibility and effectiveness. Development models such as ADDIE and Borg & Gall are still widely used in educational research because they provide systematic stages for developing learning products (Matos et al., 2023).

Initial observations conducted in November 2025 at a public elementary school in Purwakarta Regency showed that 68% of fourth-grade students were unable to write procedural texts coherently. Furthermore, most students appeared hesitant to begin writing and were reluctant to read their work due to a lack of confidence. Teachers reported that the available teaching materials were still general and did not provide adequate visual step-by-step guidance. These findings support the importance of developing ADI and Canva-based teaching materials to improve the quality of teaching and learning to write procedural texts at the school.

Based on the above description, this study aims to examine the process of developing instructional materials, their level of feasibility, the effectiveness of their use, as well as the challenges faced by teachers and students during their implementation in learning activities. This study is expected to produce instructional materials that are valid, practical, and effective for teacher use, and to contribute scientifically to the development of technology-based Indonesian language learning at the elementary school level.

RESEARCH METHODS

Research Design

This study uses the Research and Development (R&D) method to produce teaching materials based on the Argument-Driven Inquiry (ADI) Model with the help of the Canva application, which aims to improve the writing skills of procedural texts and the self-confidence of elementary school students. The R&D approach was chosen because it allows researchers to produce validated products through a systematic and empirical process. The development model used in this study is an adaptation of the Borg & Gall model that has been simplified into the stages of needs analysis, design, product development, expert validation, product revision, limited trials, extensive trial and final product. This model is widely used in research on teaching materials development in elementary schools because it is flexible and effective in producing quality educational products.

Research Target/Subject

The research was conducted at a public elementary school in Purwakarta Regency during the odd semester of the 2025/2026 academic year. The research subjects consisted of 28 fourth-grade students as product trial participants, two Indonesian language teachers as collaborators, and three expert validators consisting of a material expert, a language expert, and a media expert. School selection was conducted purposively based on initial observations that indicated that students' procedural text writing skills and self-confidence were still low, and there was a lack of ADI-based teaching materials integrated with digital platforms such as Canva. Initial observation data showed that most students experienced difficulties in compiling procedural steps and were reluctant to present their writing in class.

Research Procedure

The development procedure follows a simplified Borg & Gall process. The first stage is needs analysis, including curriculum study, student characteristics analysis, and observation of the learning process of procedural texts in fourth grade. The second stage is design, which involves preparing an initial draft of the teaching materials based on the ADI model, complemented by Canva visual displays to facilitate students' understanding of the structure of the procedural text. The third stage is development, which involves creating teaching materials in the form of digital modules and student activity sheets. The fourth stage is expert validation, where the product is validated by media experts, material experts, and language experts to obtain input regarding the appropriateness of the content, language, and visual design. The fifth stage is limited testing, involving fourth grade students to determine the practicality and student responses to the teaching materials. The final stage is product revision based on the validation and trial results to produce teaching materials that are suitable for use. This stepwise approach is in accordance with development research standards that ensure the quality and effectiveness of learning products.

Instruments, and Data Collection Techniques

Data was collected using several instruments, namely:

1. Expert Validation Sheet: Used to assess the suitability of teaching materials in terms of content, language, presentation, and graphics. The validator provides a score and makes suggestions for improvement. Expert validation is standard practice in development research to ensure product quality.
2. Procedural Text Writing Skills Test: The test is administered before and after using the teaching materials to measure students' writing skills. The test covers aspects of appropriateness of purpose, completeness of steps, presentation structure, and language accuracy.
3. Student Self-Esteem Questionnaire: This questionnaire uses a four-point Likert scale to measure students' self-confidence in writing and presentation activities. This instrument is designed based on self-confidence indicators in the context of language learning. The questionnaire consists of thirty-five statements and is administered to students before and after the learning process. The questionnaire results are then averaged to determine the increase in student self-confidence, both overall and based on each indicator.

4. Observation and Interview Sheets: Observation sheets were used to assess the practicality of the teaching materials and student engagement during learning. Interviews were conducted with teachers to determine their needs and responses to the teaching materials.

Data analysis technique

Data analysis was conducted quantitatively and qualitatively. Expert validation data was analyzed using a feasibility percentage formula to determine the product's validity category. Trial data was analyzed using the average writing skill score to determine improvement after using the teaching materials. Self-confidence analysis used total score calculations and category interpretation. Meanwhile, qualitative data from observations and interviews were analyzed using data reduction, data presentation, and conclusion drawing techniques. This combination of analytical techniques aims to provide a comprehensive overview of the feasibility, practicality, and effectiveness of the developed teaching materials.

RESULTS AND DISCUSSION

Result

The process of developing teaching materials using the Argument-Driven Inquiry (ADI) model, using Canva, was carried out systematically to ensure that the resulting teaching materials were able to meet the learning needs of writing procedural texts while increasing students' self-confidence. Each stage of development was directed at addressing the main problems found in initial observations, namely students' low ability to sequence procedural steps, lack of accuracy in using command language, and minimal self-confidence when presenting their written results. In addition, teachers stated that previous learning was still textbook-centered, resulting in students' lack of engagement in the argumentative thinking process. The ADI teaching materials, using Canva, were developed to provide a more visual and interactive learning process and support students in organizing arguments before writing.

Table 1. Stages of ADI teaching material development assisted by Canva

Stages of Development Model	Findings
Needs analysis	Students have difficulty composing procedural texts in a coherent manner, have low self-confidence, and use of media is still conventional.
Design	Developing ADI-Canva teaching material designs, including the ARG-EVI-REA (claim-evidence-reasoning) flow to support the writing process
Product development	Developing teaching materials, teaching modules, argumentative LKPD, Canva templates, and assessment instruments
Expert validation	All components were found to be acceptable with minor suggestions for instruction simplification.
Product revision	Improve the appearance of Canva, adjust the font size, add visual icons, and simplify work steps.
Limited trial	Students begin to be able to construct simple arguments, although they require intensive guidance from the teacher.
Extensive trials	Improvements in writing skills and self-confidence were more consistent.
Final product	ADI-Canva teaching materials that are suitable, practical, and effective for learning to write procedural texts

Based on Table 1, each stage contributed to the development of a usable product. Findings from the needs analysis stage revealed a gap between learning demands and students' actual abilities. The design and development stage confirmed that the integration of Canva's visualized ADI argumentation was able to help students organize their ideas systematically. In limited trials, students began to express their reasoning before writing, although some still needed additional examples.

In extensive trials, the improvement was much more stable, marked by a more logical sequence of steps, the use of appropriate procedural conjunctions, and students' increased confidence in presenting their writing to the class. Overall, the development process demonstrated that the Canva-assisted ADI model was able to create a more coherent, interactive, and meaningful learning flow for students.

Product validation was conducted by three validators: a material expert, a language expert, and a media expert. The validation process focused on four main aspects: content appropriateness, language, presentation, and media graphics. The validators assessed the suitability of the Canva-assisted ADI teaching materials for the learning objectives of writing procedural texts and their support for improving student self-confidence.

Based on the assessment results, the teaching materials received an average score ranging from adequate to very adequate. No aspect received a full score, but all aspects approached the optimal appropriateness category. The following table summarizes the expert validation results:

Table 2. Feasibility test results

Component	Validator 1			Validator 2			Validator 3			Ave.	Expla.
	Score	%	Expla.	Score	%	Expla.	Score	%	Expla.		
Instructional Materials	123	98.40%	Very Feasible	120	96.00%	Very Feasible	121	96.80%	Very Feasible	97.07%	Very Feasible
Student Worksheets	105	100.00%	Very Feasible	98	93.33%	Very Feasible	100	95.24%	Very Feasible	96.19%	Very Feasible
Learning Media	94	94.00%	Very Feasible	95	95.00%	Very Feasible	95	95.00%	Very Feasible	94.67%	Very Feasible
Lesson Plan	103	98.10%	Very Feasible	102	97.14%	Very Feasible	100	95.24%	Very Feasible	96.83%	Very Feasible

Based on Table 2, the results of the feasibility test indicate that all developed components fall into the very feasible category. The instructional materials component obtained an average feasibility percentage of 97.07 percent, indicating that the content, presentation, and language of the materials met very good feasibility criteria according to the validators. The student worksheets (LKPD) also demonstrated a very high level of feasibility, with an average percentage of 96.19 percent, indicating that the activities, instructions, and alignment of the worksheets with the learning objectives were considered highly adequate. The learning media obtained an average feasibility percentage of 94.67 percent and were categorized as very feasible, indicating that the media were appropriate, engaging, and effectively supported the learning process. In addition, the lesson plans (RPP) achieved an average feasibility percentage of 96.83 percent and were categorized as very feasible, showing that the learning plans were systematically designed, aligned with the syntax of the instructional model, and supported the achievement of learning objectives. Overall, these results indicate that the developed products are suitable for use in the learning process.

Nevertheless, the validators also provided several suggestions for improving the developed products. These suggestions included refining the use of Bloom's taxonomy in the test instruments to ensure alignment with the indicators and learning objectives, as well as completing the foreword and table of contents in the instructional materials to improve the systematic structure of their presentation. Furthermore, for the learning media component, the validators recommended adjusting the font size to a minimum of sixteen points to enhance readability and student comfort when using the media.

The improvement of students' writing skills was analyzed based on a comparison of pretest and posttest scores in four main aspects, namely: (1) completeness of the structure of procedural texts, (2) accuracy of the sequence of steps, (3) use of procedural conjunctions, and (4) clarity of language. These four aspects are important indicators in assessing the quality of procedural texts written by students.

The following table presents descriptive statistics of the pretest and posttest results.

Table 3. Descriptive statistics of pretest and posttest writing procedural texts

Statistics	Pretest	Posttest
Number of students	28	28
Minimum score	48.5	65.2
Maximum score	72.4	88.6
Average	59.20	76.85
Standard deviation	7.35	8.12

The results in Table 3 show significant improvements across all assessment aspects. The average increase from 59.20 to 76.85 indicates that most students experienced consistent progress in understanding and applying the structure of procedural text writing. The increase in the minimum score from 48.5 to 65.2 indicates that low-ability students significantly benefited from using Canva-assisted ADI teaching materials, particularly in understanding procedural steps and the use of imperative sentences. They became better able to organize steps sequentially and include appropriate procedural conjunctions.

Meanwhile, the increase in the maximum score from 72.4 to 88.6 indicates that high-ability students are increasingly skilled at writing detailed, comprehensive, and argumentative procedural texts. They can establish logical relationships between steps, clarify the function of each action, and make the text easier to understand. Thus, these findings confirm that the development of Argument-Driven Inquiry (ADI) -based teaching materials with Canva's support can improve the quality of students' writing, both in terms of content and presentation. The visualization of ADI steps and structure displayed through Canva has been shown to help students organize ideas more coherently and systematically.

To ensure that the improvements were not simply coincidental, further analysis was conducted using normality tests, paired sample t-tests, and N-Gain. This analysis aimed to determine whether the Canva-assisted ADI model was truly effective in improving students' writing skills.

Table 4. Results of statistical analysis of the effectiveness of the ADI–Canva model

Test	Mark
Sig. pretest normality	0.712
Sig. posttest normality	0.689
Sig. paired sample t-test	0,000
N-gain	0.41 (Medium)

The significance value of the normality test indicates that the data is normally distributed, making it suitable for analysis using a paired sample t-test . The results of the paired sample t-test showed a significance value of 0.000 ($p < 0.05$), indicating a very significant difference between the pretest and posttest results. This confirms that the ADI–Canva Model has a significant contribution in improving students' procedural text writing skills.

An N-Gain value of 0.41 falls into the moderate category, but still indicates significant and stable improvement. The moderate category indicates that students are experiencing consistent development, not transient or uneven improvement. This improvement aligns with the ADI model's emphasis on critical thinking through claims–evidence–reasoning , which, when visualized through Canva, makes the writing process more structured and easier for students to follow.

Canva's step-by-step visualizations, procedural icons, and engaging interface help students understand the logical relationships between steps, enabling them to produce more coherent, systematic, and communicative procedural texts. Therefore, quantitative data and statistical effectiveness analysis indicate that the Canva-assisted ADI model is effective in improving elementary school students' procedural text writing skills.

To determine students' levels of self-confidence, a self-confidence questionnaire was administered before and after the implementation of the learning activities. The questionnaire results were then analyzed by calculating the mean scores to identify whether there was an improvement in students' self-confidence. The results of the students' self-confidence questionnaire are presented in the following table.

Tabel 5. Results of the students' self-confidence questionnaire

Statistics	Pretest	Posttest
Mean Score	69.50	117.91
Mean Percentage	49.64%	84.22%
Category	Enough	Very Good
Improvement		34.58%

Based on Table 5, the results of the students' self-confidence questionnaire indicate a substantial improvement following the implementation of the learning activities. The mean score increased from 69.50 in the pretest to 117.91 in the posttest, while the mean percentage rose from 49.64 percent, categorized as *fair*, to 84.22 percent, categorized as *very good*. Overall, students' self-confidence improved by 34.58 percent, demonstrating a positive change after the intervention.

This improvement suggests that the learning process effectively facilitated students' engagement and confidence in expressing ideas through writing and presentation activities. The structured learning stages and opportunities for argumentation and peer interaction likely encouraged students to actively participate, articulate their thoughts, and present their work with greater confidence. In addition, the use of visually appealing and interactive learning media supported student motivation and reduced anxiety during learning activities. These findings indicate that the implemented instructional approach contributed positively to the development of students' self-confidence and supported a more active and student-centered learning environment.

Student and teacher responses were collected through interviews and questionnaires to obtain a comprehensive overview of the learning experience using ADI-Canva-based teaching materials. Analysis of these responses is crucial for assessing the model's implementation aspects, including student comfort, teacher perceptions, and challenges encountered during the learning process. The results of the analysis are presented in Table 5.

Table 6. Results of teacher and student interviews

Respondents	Obstacles Encountered
Student	It took some time to adapt to the argument-building stage, but I found Canva's attractive layout very helpful.
Teacher	The model encourages student activity, but requires good time management so that all stages of ADI can be implemented.

Interviews with students showed that most found Canva helpful because its visual interface made it easier to organize the steps in writing procedural texts. Canva provides a clear and attractive layout, making it easier for students to understand the differences between claims, evidence, and reasoning. However, some students admitted that they needed time to adapt, especially during the argumentation stage, as this stage requires the ability to logically connect evidence to claims. With teacher guidance, this difficulty gradually decreased, and students were able to gradually adapt to the ADI flow.

From the teacher's perspective, the ADI–Canva model is considered effective in increasing student engagement and participation in learning. Teachers reported that students appear more motivated to write when given assignments through Canva's visual medium, as the visuals make the learning process more engaging and less monotonous. However, teachers also emphasized that time management is a major challenge. Each stage of the ADI model requires sufficient time, especially when students discuss evidence and formulate arguments. Teachers need to create more detailed time allocations so that all stages can be completed in one meeting or divided into two meetings without compromising the quality of learning.

Furthermore, several additional challenges were encountered during implementation. Some students were unfamiliar with certain features in Canva, requiring more intensive guidance initially. Some students also experienced technical difficulties with their devices, such as slow internet connections or limited device resources, requiring learning to be tailored to each student's individual circumstances. However, overall, both students and teachers agreed that the ADI–Canva learning materials provided a more enjoyable and visual learning experience and helped students understand the structure of procedural text writing more systematically.

These findings indicate that student and teacher responses to the model were very positive, while the challenges that arose were technical in nature and could be addressed through mentoring and better time management. This reinforces the conclusion that ADI–Canva is not only quantitatively effective but also feasible for implementation in elementary school learning contexts.

Discussion

This study found that the development of teaching materials based on the Argument-Driven Inquiry (ADI) model, supported by digital visual tools, helped address students' low ability to organize procedural texts coherently and enhanced their self-confidence. This finding is in line with previous literature stating that argumentation-based learning can improve critical thinking and writing skills among elementary school students (Amelia et al., 2025). This indicates that ADI is not merely a content delivery strategy, but also an effective thinking strategy within the context of language literacy.

The needs analysis revealed that the use of conventional media was insufficient to facilitate students' visual thinking processes. This finding is reinforced by studies showing that digital educational media can enhance student engagement and improve the organization of ideas during the writing process (Chico et al., 2022). These results suggest that the integration of visual media in writing instruction is not merely supplementary, but constitutes a significant component in achieving learning objectives.

The design stage, which incorporated a claim–evidence–reasoning framework into the teaching material design, was proven to help students organize their ideas prior to writing. This is consistent with research indicating that instructional models emphasizing the integration of visual and argumentative elements can improve the quality of students' written arguments (Dewi, 2025). This finding highlights that visualizing cognitive structures is a fundamental foundation in the development of writing literacy.

The developed products included instructional modules, argument-based student worksheets, and assessment instruments integrated with the ADI syntax. This approach aligns with modern instructional design principles that emphasize alignment among learning objectives, instructional activities, and assessment (Andrade & Heritage, 2017). These findings indicate that structurally coherent teaching materials can strengthen students' cognitive processes in writing procedural texts.

Expert validation results showed that all components of the teaching materials were categorized as highly feasible, although minor revisions were still required. This finding is consistent with evidence that expert involvement in instructional validation significantly enhances the quality of teaching materials (Warkineh et al., 2024). This reinforces the argument that expert validation is a crucial step in development research to ensure that products are suitable for real-world implementation.

Suggestions for improvement, such as aligning assessment instruments with higher-order thinking taxonomy indicators, highlight the importance of assessment quality. This is further supported by developments in authentic assessment, which recommend the use of rubrics based on thinking skills (Darling-Hammond et al., 2020). These findings indicate that not only content, but also the quality of evaluation must be carefully designed.

Limited trials showed improvements in students' ability to construct simple arguments with intensive guidance. This finding is consistent with evidence that argument-guided learning requires initial scaffolding to help students understand critical thinking processes (Asrobi, 2018). This suggests that argumentative learning should be deliberately designed with appropriate scaffolding for students.

The results of extended trials demonstrated improvements in writing skills, particularly in the consistency of text structure and the sequencing of procedural steps. This is in line with research showing that inquiry-based strategies enhance the organization of students' writing (Johnson et al., 2021). These findings reinforce the notion that ADI effectively facilitates more systematic writing skills.

Statistical analysis indicated a significant difference between pretest and posttest scores, suggesting that the improvement in writing skills did not occur by chance. This finding is consistent with empirical evidence showing that inquiry-based learning has a significant effect on students' literacy competencies (Hmelo-Silver et al., 2007). This confirms the strength of ADI in statistically improving learning outcomes.

The moderate N-Gain value indicates stable improvement. This finding is reinforced by research suggesting that changes in literacy skill quality tend to occur gradually but sustainably, particularly when developed through structured thinking practices (Alexander & Fox, 2024). This suggests that improvements in students' writing skills represent a consistently developing process.

A significant increase in students' self-confidence was evident from the difference between pre-intervention and post-intervention scores. This finding is consistent with research indicating that experiences involving discussion, argumentation, and the presentation of written work positively enhance students' self-efficacy (Varier et al., 2021). This suggests that affective aspects also improved alongside the implementation of digital-based ADI.

Students' responses to the use of visual media indicated that Canva helped reduce anxiety and increase motivation in writing activities. This finding is reinforced by evidence that interactive visual media can enhance learning motivation and student engagement (Nkomo et al., 2021). These results emphasize that media visualization is not merely an aesthetic tool, but also a powerful learning motivator.

From the teachers' perspective, the ADI model supported by digital media was considered effective, although it required good time management. This finding aligns with studies on educational technology implementation, which suggest that the greatest challenges typically lie in classroom management rather than the technology itself (Schrum & Levin, 2009). This underscores that teacher readiness is a critical factor in the successful implementation of instructional innovations.

Overall, the findings of this discussion indicate that ADI-based teaching materials supported by digital visual media are not only quantitatively effective, but also positively received qualitatively by both students and teachers. This strengthens the argument that instructional innovations combining argumentative thinking strategies and digital media can produce dual impacts on students' cognitive and affective skills. These findings suggest that this learning model has strong potential for broader adoption.

CONCLUSION

Based on the results of the study and data analysis, it can be concluded that the development process of Argument-Driven Inquiry (ADI) teaching materials supported by Canva was carried out systematically and in accordance with the planned development stages, namely needs analysis, design, product development, expert validation, product revision, limited trial, and final product. The validation results indicate that the teaching materials fall into the very feasible category. This is reflected in the average scores from the three validators for each component: teaching materials at 97.07%, student worksheets (LKPD) at 96.19%, learning media at 94.67%, and lesson plans (RPP) at 96.83%. In addition, the developed teaching materials were proven to be effective in improving students' procedural text writing skills and self-confidence. The improvement in procedural text writing skills was indicated by an increase in the average pretest score from 59.20 to 76.85 in the posttest, with an N-Gain value of 0.41, which falls into the moderate category. Meanwhile, the results of the student self-confidence questionnaire showed a significant increase, from an initial score of 49.64% in the fair category to 84.22% in the very good category.

Nevertheless, the implementation of the teaching materials still faced several challenges from both students and teachers. Students required time to adapt to the argument construction stages in the ADI model; however, the attractive design and layout of Canva were proven to facilitate understanding. On the other hand, teachers perceived that this model effectively promoted student engagement but required good time management to ensure that all ADI stages could be implemented effectively.

The findings of this study provide both theoretical and practical implications for Indonesian language learning in elementary schools. Theoretically, these findings strengthen the relevance of the Argument-Driven Inquiry (ADI) model as an argumentation-based learning approach that is effective not only in science education but also in language skill learning, particularly in procedural text writing. The integration of Canva-assisted digital media demonstrates that engaging and interactive visualizations can support systematic thinking processes, argument construction, and enhance students' self-confidence in expressing ideas in written form. Practically, ADI teaching materials supported by Canva can serve as an innovative alternative for teachers to create more active, collaborative, and student-centered learning environments, as they have been proven to significantly improve learning outcomes and students' affective aspects.

Based on the results of the study, several recommendations can be proposed. Teachers are encouraged to implement Canva-assisted ADI teaching materials continuously with careful time management planning so that all stages of ADI can be optimally executed. Teachers should also provide gradual guidance to students, particularly during the stages of argument construction and reinforcement, to help students adapt more quickly to this learning model. Schools are advised to provide adequate facilities and infrastructure, especially the availability of digital devices and reliable internet access, to support the use of Canva in learning activities. Future researchers are recommended to examine the effectiveness of these teaching materials using larger samples, different grade levels, and by integrating other variables such as critical thinking skills, collaboration, or digital literacy to obtain more comprehensive findings.

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