

BUKTI KORESPONDENSI
ARTIKEL JURNAL SINTA 2

Judul : Developing Kotak Pintar Cerdas Aksara (KOPICA) Media Integrated with Religious Tolerance for Enhancing First-Graders' Initial Reading Skills

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1. Bukti submit artikel

The screenshot shows the JOLLT Journal of Languages and Language Teaching website. The header includes the journal's name, ISSN numbers (2338-0810 Print, 2621-1378 Online), website URL, and accreditation information. The navigation bar lists: HOME, ABOUT, USER HOME, SEARCH, CURRENT, ARCHIVES, and ANNOUNCEMENTS. The main content area is titled "Active Submissions" and shows a table with one submission.

ID	MM-DD SUBMIT	SEC	AUTHORS	TITLE	STATUS
15698	05-16	ART	Rosita	DEVELOPING KOPICA WITH RELIGIOUS TOLERANCE TO ENHANCE THE...	Awaiting assignment

Below the table, it says "1 - 1 of 1 Items". On the left, there are logos for indexing services: GARUDA, Google, ISJD, Crossref, ROAD, Scilit, and BASE. On the right, there is an "ADDITIONAL MENU" with links: FOCUS AND SCOPE, PUBLICATION ETHICS, EDITORIAL TEAM, REVIEWER, OPEN ACCESS POLICY, and SCREENING PLAGIARISM.

2. Bukti konfirmasi submission

The screenshot shows the author dashboard for the JOLLT Journal of Languages and Language Teaching. The browser address bar shows the URL: e-journal.undikma.ac.id/index.php/jollt/authorDashboard/submission/15698. The page title is "JOLLT Journal of Languages and Language Teaching". Below the title, there is a "Back to Submissions" link. The main content area shows the submission details for ID 15698, authored by Rosita et al., with the title "Developing Kotak Pintar Cerdas Aksara (Kopica) Media Integrated with Religious Tolerance for Enhancing First-G". There is a "Library" button. The workflow is shown as "Publication" with sub-steps: Submission, Review, Copyediting, and Production. The "Submission Files" section shows a file named "adminojs, Template JOLLT 2024-2025.docx" uploaded on May 16, 2025, with a file size of 56931 bytes. There is a "Search" button and a "Download All Files" button.

3. Bukti konfirmasi *review*

Reviewer's Attachments				Q Search
	63120	17 15698-56931-1-SM DEVELOPING KOPIKA WITH RELIGIOUS TOLERANCE 1.docx	August 29, 2025	
	63121	17 15698-56931-1-SM DEVELOPING KOPIKA WITH RELIGIOUS TOLERANCE 2.docx	August 29, 2025	

4. Bukti informasi revisi dari jurnal

 kepada Farida ▾

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We are writing to extend our sincere gratitude for submitting your manuscript to our publication. We greatly appreciate your effort and dedication in producing this valuable contribution to the field. Your research has the potential to impact and advance the knowledge in the subject area significantly. Based on the review process, we have decided to ask the author/s to revise the manuscript with some revisions within 1-2 weeks.

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DEVELOPING KOPICA WITH RELIGIOUS TOLERANCE TO ENHANCE THE INITIAL READING SKILL OF FIRST-GRADERS

Reviewer's Comments

Part of article	Comments
	The title, " <i>Developing KOPICA with Religious Tolerance to Enhance the Initial Reading Skill of First-Graders</i> ," effectively conveys the research focus. However, it would benefit from further clarity regarding the term "KOPICA."
Title	To prevent ambiguity, consider briefly explaining this acronym in the title or subtitle, such as "Developing KOPICA (Kotak Pintar Cerdas Aksara) Media Integrated with Religious Tolerance for Enhancing Initial Reading Skills in First-Graders."
	The abstract clearly outlines the research background, objectives, methods, and key findings, presenting a concise yet comprehensive summary. Still, adding explicit mention of the practical implications for teachers or curriculum developers would improve its overall utility.
Abstract	Additionally, clearly stating the specific novelty or originality of integrating religious tolerance into initial reading media would strengthen the abstract significantly.
	In the introduction, the manuscript successfully establishes the importance of initial reading skills and highlights literacy issues in Indonesia. It also clearly positions the need for character education, specifically religious tolerance.
	To deepen readers' understanding, explicitly discussing the novelty or originality of integrating religious tolerance into reading skills through KOPICA media compared to existing approaches would significantly strengthen the justification.
Introduction	Moreover, including specific research questions at the end of the introduction would provide clearer guidance for readers regarding the study's objectives.
	The literature review effectively summarizes previous research on initial reading skills and learning media. However, integrating more empirical studies from reputable international journals published within the past five years would considerably enhance scholarly rigor.
	Explicitly identifying and discussing gaps from previous studies and clearly showing how this research addresses those gaps would also improve the coherence of the review.
	The research design is clearly presented, using the ADDIE model, suitable for product development studies. Still, adding a detailed rationale for choosing this model and justifying its appropriateness specifically for developing KOPICA media would further clarify methodological rigor.
Research Method	Participant selection is adequately described, but offering additional information about demographic characteristics, such as prior reading levels or familiarity with similar learning media, would provide valuable context for interpreting the

results.

The instruments and data collection methods are suitably chosen and described. However, explicitly stating how these instruments were validated or pilot-tested would significantly enhance methodological transparency and reliability.

The data analysis methods described, both qualitative and quantitative, are appropriate and adequately justified. Yet, elaborating more clearly on the processes involved in coding qualitative data and conducting the quantitative analyses, particularly ensuring reliability and validity, would strengthen the methodological rigor of this section.

Research Findings

The research findings are well-presented using clear tables and statistical analyses. However, additionally providing visual representations or charts illustrating pre- and post-test improvements would significantly enhance visual clarity and readability for readers.

Discussion

In the discussion, the authors effectively link findings with existing literature, confirming the effectiveness and practicality of KOPICA media.

Conclusion

The conclusion effectively summarizes findings but could more explicitly discuss the practical implications for teachers or schools, alongside clearly recognizing research limitations and concretely suggesting future research avenues, particularly regarding media integration and scalability.

References

References are comprehensive but should consistently follow the latest APA (7th edition) guidelines, with an emphasis on including up-to-date scholarly work from the past five to ten years to maintain academic rigor and contemporary relevance.

Article Info	Abstract
Article History Received: Revised: Published:	<i>The low level of students' initial reading skills and the need to instill religious tolerance make it necessary to develop this learning media. This study aims to develop KOPICA to enhance initial reading skills integrated with religious tolerance and evaluate its validity and practicality. This R&D uses the ADDIE development model (Analysis, Design, Development, Implementation, Evaluation). Based on the analysis of expert validation, the overall validation score was 88.3%, and the results of the practicality assessment by users showed an average score of 92%. Based on data analysis using the Paired Samples t-test formula with SPSS 19, the probability value (Sig) is 0.000, which means it has an error rate of ≤ 0.05. These results validate KOPICA as a practical and effective media that can help students' initial reading in primary school. This development contributes to implementing 21st-century learning that centers learning on students. In addition, this development also contributes to introducing religious tolerance values that will benefit students' social life in the future.</i>
Keywords KOPICA; Initial Reading Skills; Religious Tolerance;	

How to cite:

INTRODUCTION

The development of science and technology has brought significant changes in human life economically, socially, culturally, and educationally (Orak & İnözü, 2021; Yulianti,

2019). From that opinion, education is a place to gain knowledge and develop literacy skills. One type of literacy that is important in the learning process is reading. By reading, one can find out various things that are not yet known (Laila et al., 2021). Reading is a collection of several activities, such as recognizing letters and words and connecting sounds, to provide a conclusion to the reading. Reading is essential in life, and Washburn argues that students' success in the learning process is determined by their mastery of reading skills (Hardiyanti, 2022).

Initial reading is the beginning stage in the reading process, which includes stringing letters, translating written symbols into sounds, and visual processes (Akbar et al., 2024; Chumairoh & Sukardi, 2023). An initial reading is crucial for students because it will make it easier to accept the learning provided by the teacher. The better students master the skills of initial reading, the better they will absorb the knowledge contained in writing (Muda, 2024). So, students must have good initial reading skills and learn well in the classroom. Initial reading skills are also the foundation for students to understand various sciences.

Based on data from the Program for International Student Assessment (PISA) released by the Organization for Economic Co-operation and Development (OECD), Indonesia ranks 62nd out of 70 countries with low literacy levels. In the Alibaca index, East Java Province is ranked 9th from the bottom, including the provinces in Indonesia with the lower literacy levels. The data proves that literacy or reading skills in Indonesia are deficient. In fact, among 34 provinces, East Java has the lowest literacy level (Depdikbud, 2019).

Problems in early reading learning in elementary schools are still challenging for many educators. Students often struggle to recognize letters, connect letters with sounds, and understand the meaning of words being read (Septiani et al., 2023). Monotonous media and the lack of active student involvement in learning exacerbate this (Mashartanto et al., 2024). In addition, character education, such as tolerance, mutual respect, and other social values, is often missed in learning that focuses solely on academic achievement.

Based on the previous study, many religious conflicts have occurred in Indonesia, so religious tolerance must be taught early (Rosita et al., 2023). Cases of intolerance that occurred in Indonesia, such as the attack on the Klenteng on January 13, 2018—a man using a motorcycle broke into the Tjoe Hwie Kiong Temple, Jalan Yos Sudarso, Kediri, East Java, breaking the Klenteng glass. The church bombing in Surabaya on May 13, 2018, and the rejection of church construction in Cilegon city in 2022 (Kemenag RI, 2022). Therefore, it is necessary to instill the value of religious tolerance in students earlier. This makes the foundation for students to respect each other's ethnicity, race, culture, and religion.

Events encountered in the surrounding environment, such as children who make fun of differences in skin color and appearance, create the basis for the need for the introduction of religious tolerance in the lower grades (Mulyana, 2023). Good and effective learning media are needed to enhance the initial reading skills as the beginning of students' footing in opening broad insights into science. Supported by the values of religious tolerance in this learning media, it is the foundation for students to live in peace with fellow religious people without questioning religion, race, ethnicity, and culture.

In the learning process, media is a means to stimulate the student's thoughts, feelings, and willingness. A good learning process can be created so that students can achieve the desired learning objectives (Juneva et al., 2025; Rohman et al., 2019). Learning media can be utilized to convey messages that will attract attention, focus, and emotions during learning activities in order to accomplish a particular learning objective (Rahmayantisa & Rosita, 2023; Tantikasari et al., 2017).

Many previous studies have developed various learning media to help the initial reading process, ranging from interactive digital media (Sholikhah et al., 2025), picture word cards (Dony et al., 2022; Yana & Nasution, 2024), flash card (Paldy et al., 2025), to phonetic aids

(Tiani et al., 2023; Westhisi, 2019). The results of this study show that media that is fun and involves students' various senses tends to be more effective in improving early literacy skills. Some approaches also integrate phonics and multisensory methods to speed up mastery of letters and syllables (Dewi, 2015).

Although various media have been developed to improve initial reading skills, most have not systematically integrated character values into the learning process. These media generally still focus on cognitive aspects and rarely explicitly combine literacy learning with the instillation of character values, especially religious tolerance. This critical gap needs to be addressed, considering the importance of early character education in forming inclusive, empathetic, and open individuals who are open to differences.

Through this research, KOPICA (Kotak Pintar Cerdas Aksara) learning media was developed, specifically designed to improve elementary school students' initial reading skills with a play-while-learning approach. This media is also loaded with content that instills religious tolerance values and positive attitudes such as mutual respect, empathy, and cooperation. This research aimed to develop and implement KOPICA media in initial reading learning and explore students' and teachers' responses to the religious tolerance content inserted in the learning media.

RESEARCH METHOD

Research Design

This research uses the R&D method. It was conducted to produce or develop products and implement them in the classroom. This study uses the ADDIE development model (Analysis, Design, Development, Implementation, and Evaluation) to develop KOPICA learning media to enhance initial reading skills, integrated with religious tolerance for grade I students in Elementary Schools. The ADDIE model procedure can be seen in the following figure.

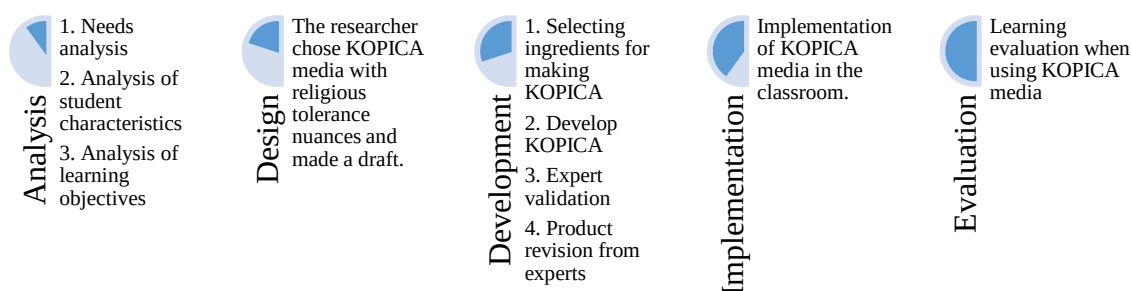


Figure 1. The ADDIE Model Procedure
(Source: Creswell, 2014)

Research Participants

In this research, the participants were 14 first-grade students of MIT Darul Muttaqien Magetan. The research was conducted in the even semester of the 2023/2024 school year. The location was chosen considering that in the school, reading habituation in grade I students is still not optimal, students need an early understanding of religious tolerance, and mainly because there is agreement from all parties, both schools, teachers, and students. This research ensures the safety and confidentiality of student privacy, both in collection and reporting. In addition to seeing the product's effectiveness through learning outcomes, 14 students in this study also provided responses about the product's practicality.

Research Instruments and Data Collection Technique

In this study, data collection techniques are adjusted to the two types of data used: qualitative and quantitative. Qualitative data are obtained through observation and interview activities. Quantitative data collection techniques are designed to assess the validity of the media, the responses of teachers and students in using this media, and the effectiveness of the media. Data are collected through validation sheets given to material and media experts to assess validity. In the validation sheet, several assessment indicators include aspects of the relevance of the media to the initial reading material, the suitability of the content to the level of knowledge and student learning development, the significance of the material to the content of religious tolerance, the quality of the media, design, appearance, and functionality of the learning media. To ascertain the level of validity, the results were examined by computing the percentage score.

Data were collected through response sheets to see the teacher and students' responses. This questionnaire evaluated the media's ease of use, attractiveness, and usefulness in supporting the learning process and students' understanding of religious tolerance in the media. To ascertain the level of practicality, responses were analyzed in percentages. Then, to see the effectiveness of the media, pre-tests and post-tests were conducted.

By using this data collection technique, this research thoroughly evaluates the validity, practicality, and effectiveness of the product, based on experts' judgment, user responses, and pretest-posttest. Table 1 contains the data collection techniques and instruments.

Table 1.
Data Collection Technique and Instrument

Data	Data Collection Technique	Instrument
Qualitative Data		
Need Analysis and Preliminary Study	Observation and interview guidelines	Observation and Interview
Quantitative Data		
Learning Media Validation	Expert Validation (Expert Judgement)	Validation Sheets
Teacher and Student Responses	User Responses	Response Questionnaires
The Effectiveness of the Media	Pre-test and Post-test	Statistical Data Analysis

Data Analysis

Qualitative data analysis techniques are carried out descriptively and qualitatively with several steps, namely (a) collecting verbal data, (b) recording, collecting, and selecting data, (c) clarifying and analyzing data, and (d) formulating the results to be used in revising the developed media. Meanwhile, quantitative data were analyzed in two stages. The first stage is the analysis of media validation results using the following formula.

$$Vah = \frac{(SVa1 + SVa2)}{SM} \times 100\%$$

Description:

Vah = Expert validation SVa₂ = Expert validation 2 score
SVa₁ = Expert validation 1 score SM = Maximum score

The results of the formula calculation were analyzed to determine the level of validity of the media that had been developed using a Likert scale, as shown in the following table.

Table 2
Percentage Level and Qualification

Percentage Level	Qualification	Description
81 s.d 100%	Very good	Feasible, no revision needed
61 s.d 80%	Good	Worth, no revision needed
41 s.d 60%	Good Enough	Less feasible, revision required
21 sd 40%	Not Good	Not feasible, revision required
Less than 20%	Very Bad	Unfeasible, revision required

RESEARCH FINDINGS AND DISCUSSION

Research Findings

The product of this research is KOPICA learning media integrated with religious tolerance to enhance the initial reading skills of primary school students. In R&D research, there are three stages of development, which will be explained in detail below.

Preliminary Study Stage

Development research using the ADDIE model begins with analysis activities. Initial observations and interviews with teachers and students were conducted at this stage. Activities at this stage aim to identify problems faced in the classroom when reading habituation activities are carried out before teaching and learning hours. The results of observations and interviews were that (a) some students did not read fluently, (b) there was a lack of media use in the process of reading habituation activities, (c) there was a lack of student interest in reading, and (d) there was a lack of knowledge and practice of religious tolerance in students.

Based on these findings, the design stage was conducted. This stage contains concepts that will be made available to the media. The planning that was prepared was (a) sketching the shape of the media, (b) selecting materials, and (c) the material used in the media.

Development Stage

At this stage, researchers began to make media following the sketches that had been designed, editing images, letters, syllables, and connecting words using the CorelDRAW application. At this stage, media development really must be done well. Some points, including religious tolerance content, must also be considered to produce KOPICA learning media with religious tolerance content ready to be validated.

KOPICA (*Kotak Pintar Cerdas Aksara*) is a type of three-dimensional visual media. KOPICA is a learning media specifically designed to enhance students' initial reading skills. This media is in the form of a box containing letter cards, syllables, linking words, punctuation marks, and pictures that are modified to be more interesting for learning, and there are pictures on the box.

Piaget's cognitive theory explains how students adapt to objects and events around them. The theory divides human development into four stages of cognitive development from birth to adulthood. First-grade students belong to the pre-operational stage. Their ability develops by using the symbols of objects around them (Tahir, 2020).

The selection of this media is determined based on the characteristics of students' cognitive development, so that students with difficulties in initial reading can be helped through the KOPICA media. KOPICA learning media is an acronym for KO meaning "Kotak" (box), PI meaning "pintar" (smart), and CA meaning "cerdas aksara" (reading). A

box is a place to store something. Generally, a box has a space with square or rectangular sides. The box is made of plywood. The word “pintar” (smart) means it is easy to understand something well. Meanwhile, the word “cerdas aksara” (reading) means understanding the contents of a written text. So, KOPICA means a box to enhance students’ reading.

The next step after designing media is validation activities by experts (expert judgement). The validation results from the material, media, and language validators can be seen in the Table 3.

Table 3
The Result of Expert Validity

No.	Validation Aspect	Score				Percentage (%)	Description
		SVa1	SVa2	Mean	Max		
1.	Material Aspect	46	42	44	50	88%	Feasible, no revision needed
2.	Media Aspect	43	46	44,5	50	89%	Feasible, no revision needed
3.	Language Aspect	22	22	22	25	88%	Feasible, no revision needed
Average Number Validation						88,3%	Feasible and no revision needed

The data shows that the overall validation score is 88.3%. Based on Table 2, a score of 88—100% is included in the “Very Good” qualification, so it is feasible, and no revision is needed. However, there were inputs and suggestions by the validators as qualitative data. So, KOPICA was revised. The following are the results of revisions based on qualitative data: (a) naming each theme in the media; (2) adding a name to the divider box so that the cards are easily returned to their place; (c) changes in the selection of terms in the instruction or user manual; and (d) addition of handles.

Implementation and Evaluation Stage

In this stage, the activities carried out in the subsequent development research are implementation and evaluation. In this report, implementation and evaluation are presented through the responses of product users (students and teachers) and the effectiveness of the media. KOPICA learning media was tested on a group of first-graders. Students and teachers filled out a response sheet to measure its practicality. The following table shows the results of teacher and student responses.

Table 4
Teacher and Student Responses

No.	Validator	Score		Percentage	Description
		Mean	Max		
1.	Teacher	47	50	94%	Very practical
2.	14 Student	9	10	90%	Very practical
Average Number Validation				92%	Very practical

According to Table 4, the average score for the responses from both teachers and students was 92%. Based on these facts, it was determined that this learning media is highly useful and very practical for the educational process.

The effectiveness of this product is seen when the media is implemented in the classroom. Sampling was conducted using the cluster sampling method. Pre-test of an initial reading test was conducted based on indicators, namely (a) students' pronunciation of letters (consonants and vowels), (b) reading fluency, (c) voice clarity in pronouncing words and sentences, and (d) students' intonation in reading. The pre-test determines students' initial

reading before using the media. The post-test is used to determine the results and skills of students after using the media. Based on the test, the average pre-test score was 77,2 and the post-test was 87.5. This shows that KOPICA learning media enhance the initial reading skills of the first-grade students. Furthermore, the data was analyzed using t-test analysis with SPSS 19. The following are the results of the calculation using SPSS 19.

Table 5
The Results of the Calculation Using SPSS 19

The Results of the Calculation Using SPSS 15						T	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Initial Reading Pretest–Initial Reading Posttest	-10.21429	3.92582	1.04922	-12.48099	-7.94758	-9.735	13	.000

Based on the table, the value obtained is sig = 0.000, which means it is smaller than α 0.05 (Sig. $\leq \alpha$ 0.05). Thus, H_0 is rejected and H_a is accepted. This means there are differences in students' reading skills before and after using KOPICA learning media. So, KOPICA can enhance the initial reading skills of the first-grader.

Discussion

Reading transcends just visual detection of printed symbols; it constitutes a reflective cognitive process reliant on advanced mental functions, including thinking patterns, assessment, analysis, reasoning, and problem-solving (Alneyadi et al., 2023). The importance of reading activities has led some researchers to conduct a development to improve these skills.

This research is based on previous studies on learning media (Polinda et al., 2023; Rohman et al., 2019) in reading skills (Muda, 2024; Mustika et al., 2023; Nikmah et al., 2025). These studies show that learning media can be used in all learning materials to enhance specific objectives. Smart box learning media cannot only be used in reading skills, but also in understanding the material in Pancasila subjects (Zahra et al., 2024). Learning media is essential in improving reading skills, so students are more interested and focused on practicing their initial reading. These studies show that learning media can improve specific objectives in learning. This study is different from the previous studies because, in addition to improving reading skills, this media is also designed for students to understand religious tolerance from an early age, so that they can practice it in the social environment in the future.

R&D is a form of research that is part of an innovation used to produce and evaluate specific products (García-Valderrama & Mulero-Mendigorri, 2005). This research makes a product of KOPICA media with religious tolerance. The purpose of developing this media is to enhance students' initial reading skills, which have been tested and validated for use with grade I elementary school students.

Many experts believe that learning media should have goals. Learning media should help students better understand concepts, principles, attitudes, and skills (Lince & Burga, 2024), offer diverse and varied learning experiences to pique students' interest in learning (Rosita & Rohmatika, 2019), become a tool in the teaching and learning process to achieve learning objectives (Ediyanto et al., 2024), cultivate specific attitudes and skills (Li et al., 2024; Mardhotillah et al., 2023) and create educational scenarios that students will recall (Yonanda et al., 2024). Based on the learning media's goal, KOPICA media was created with

low-grade students' needs in mind. These needs included: (1) the availability of pictures that are relevant to everyday life to make it easier for students to follow reading lessons through the media; (2) the availability of various alternative learning experiences; and (3) the practice of initial reading skills and the development of a religiously tolerant mindset in students.

Based on that description, this study evaluates the validity, practicality, and effectiveness of KOPICA media with religious tolerance to enhance primary school students' initial reading skills. The findings showed that the developed media met the standards based on these three aspects. Validity was established through expert evaluation of materials, media, and language, an essential step in educational research. This is done to ensure that the media can be accurately evaluated in terms of content, design, and language. The assessment given by experts on the material aspect is 88%, the media aspect is 89%, and 88% also for the language aspect, resulting in an overall validity score of 88.3%. This is in line with the opinion that validity is a key aspect of tracking the quality of a product (Schumann et al., 1995) and ensuring that the product is fit for purpose (Saputri et al., 2023).

Practicality, assessed through teacher and student responses, reached an average of 92%. This shows that the media is ready to be widely implemented. The effectiveness is shown based on the table of paired sample t-test results. The value obtained is $\text{sig} = 0.000$, which means it is smaller than $\alpha 0.05$ ($\text{Sig.} \leq \alpha 0.05$). Thus, H_0 is rejected and H_a is accepted. This means there are differences in students' reading skills before and after using KOPICA learning media. Overall, these results validate KOPICA as a practical and usable tool to assist elementary school students in initial reading. This aligns with opinions that confirmed that the learning media validated and tested for efficacy can capture students' attention, facilitating a fun learning experience (Dony et al., 2022). Similarly, Azzahrah & Rustini (2023) explain that learning media can also make students better understand the material content, including religious tolerance (Rosita et al., 2023). This study corroborates these principles, demonstrating the suitability of KOPICA media for primary school students.

CONCLUSION

The novelty of this research is integrating religious tolerance content in the learning media used to enhance students' initial reading skills. This development proves that media can enhance the learning quality to be engaging, interactive, and fun. It contributes to implementing 21st-century learning that centers learning on students. In addition, this development contributes to introducing religious tolerance values that will benefit students' social lives in the future. The positive results in this study do not make the research perfect. There are several limitations to the research that can be carried out. The limitations of this study are the limited number of samples in one school. In addition, for further research, media development that utilizes technology can be interesting. Based on the results of this study, it can be concluded that learning media with religious tolerance content is very effective in being applied and enhancing students' initial reading and introducing students to the value of religious tolerance. This research shows that using media in learning can help students more easily achieve learning objectives, enrich the learning experience, and generate student enthusiasm and engagement. Thus, using media appropriate to learning objectives and student development is recommended, especially for primary school students transitioning between early and basic education. In order to optimize the use of media in education, this study also recommends training for educators.

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DEVELOPING KOPICA WITH RELIGIOUS TOLERANCE TO ENHANCE THE INITIAL READING SKILL OF FIRST-GRADERS

Reviewer's Comments

Part of article	Comments
	The manuscript's title accurately represents the research's central theme.
Title	To enhance clarity, the authors might consider briefly spelling out or explaining the acronym "KOPICA" within the title or as a subtitle, for instance, "Developing Kotak Pintar Cerdas Aksara (KOPICA) Media Integrated with Religious Tolerance for Improving First-Graders' Initial Reading Skills," thereby ensuring immediate understanding of the research context.
Abstract	In the abstract, the authors provide clear background information, research methods, key results, and conclusions. To improve it further, explicitly stating the implications for educational practice or policy would enhance its usefulness.
	Highlighting the innovative aspect of integrating religious tolerance explicitly into reading media could also enrich the abstract's clarity and impact.
Introduction	The introduction effectively establishes the importance of initial reading abilities and addresses literacy issues in Indonesia. However, explicitly discussing the unique contribution of integrating religious tolerance within reading education through KOPICA media could substantially strengthen the manuscript's justification.
	Including clearly defined research questions at the end of the introduction would help guide the reader's understanding of the study's specific objectives.
	The research design section clearly describes the use of the ADDIE model for media development. Providing further justification for selecting this particular model and elaborating more on its suitability for the study's specific objectives and context could improve the clarity and rigor of this methodological choice.
Research Method	The description of research participants is clear but would benefit from additional contextual information, such as students' initial skill levels or previous exposure to similar learning media. This additional context could enhance readers' comprehension of the findings.
	The research instruments and data collection techniques are appropriately selected and clearly explained. Further detail about validation or pilot testing of the instruments would increase methodological transparency, enhancing the reliability and credibility of the data collected.
	Data analysis methods for qualitative and quantitative data are suitably detailed. However, providing more explicit descriptions of the qualitative data coding process and how quantitative analyses ensured reliability and validity would significantly improve methodological rigor.
Research Findings	The research findings are effectively communicated using clear tables. Including graphical illustrations or visual comparisons of the improvements between pre-test and post-test scores would notably enhance clarity and ease of interpretation for readers.
Discussion	The discussion aligns findings effectively with the existing theoretical framework.

	To strengthen coherence, explicitly linking these discussions directly to the research objectives initially stated in the introduction would substantially enhance reader understanding and reinforce the manuscript's logical flow.
Conclusion	The conclusion succinctly summarizes the key findings. Nonetheless, explicitly stating practical implications for educators or administrators, clearly recognizing the study's limitations, and concretely recommending avenues for future research, particularly on the scalability of the media and further technology integration, would significantly enrich its academic and practical contribution.
References	References included in the manuscript should be consistently formatted according to APA (7th edition) guidelines, emphasizing recent scholarly literature from the past five to ten years. Updating references accordingly will ensure academic rigor and demonstrate the contemporary relevance of the manuscript's research foundations.

Article Info	Abstract
Article History Received: Revised: Published: Keywords KOPICA; Initial Reading Skills; Religious Tolerance;	<i>The low level of students' initial reading skills and the need to instill religious tolerance make it necessary to develop this learning media. This study aims to develop KOPICA to enhance initial reading skills integrated with religious tolerance and evaluate its validity and practicality. This R&D uses the ADDIE development model (Analysis, Design, Development, Implementation, Evaluation). Based on the analysis of expert validation, the overall validation score was 88.3%, and the results of the practicality assessment by users showed an average score of 92%. Based on data analysis using the Paired Samples t-test formula with SPSS 19, the probability value (Sig) is 0.000, which means it has an error rate of ≤ 0.05. These results validate KOPICA as a practical and effective media that can help students' initial reading in primary school. This development contributes to implementing 21st-century learning that centers learning on students. In addition, this development also contributes to introducing religious tolerance values that will benefit students' social life in the future.</i>
How to cite:	

INTRODUCTION

The development of science and technology has brought significant changes in human life economically, socially, culturally, and educationally (Orak & İnözü, 2021; Yulianti, 2019). From that opinion, education is a place to gain knowledge and develop literacy skills. One type of literacy that is important in the learning process is reading. By reading, one can find out various things that are not yet known (Laila et al., 2021). Reading is a collection of several activities, such as recognizing letters and words and connecting sounds, to provide a conclusion to the reading. Reading is essential in life, and Washburn argues that students' success in the learning process is determined by their mastery of reading skills (Hardiyanti, 2022).

Initial reading is the beginning stage in the reading process, which includes stringing letters, translating written symbols into sounds, and visual processes (Akbar et al., 2024; Chumairoh & Sukardi, 2023). An initial reading is crucial for students because it will make it easier to accept the learning provided by the teacher. The better students master the skills of initial reading, the better they will absorb the knowledge contained in writing (Muda, 2024).

So, students must have good initial reading skills and learn well in the classroom. Initial reading skills are also the foundation for students to understand various sciences.

Based on data from the Program for International Student Assessment (PISA) released by the Organization for Economic Co-operation and Development (OECD), Indonesia ranks 62nd out of 70 countries with low literacy levels. In the Alibaca index, East Java Province is ranked 9th from the bottom, including the provinces in Indonesia with the lower literacy levels. The data proves that literacy or reading skills in Indonesia are deficient. In fact, among 34 provinces, East Java has the lowest literacy level (Depdikbud, 2019).

Problems in early reading learning in elementary schools are still challenging for many educators. Students often struggle to recognize letters, connect letters with sounds, and understand the meaning of words being read (Septiani et al., 2023). Monotonous media and the lack of active student involvement in learning exacerbate this (Mashartanto et al., 2024). In addition, character education, such as tolerance, mutual respect, and other social values, is often missed in learning that focuses solely on academic achievement.

Based on the previous study, many religious conflicts have occurred in Indonesia, so religious tolerance must be taught early (Rosita et al., 2023). Cases of intolerance that occurred in Indonesia, such as the attack on the Klenteng on January 13, 2018—a man using a motorcycle broke into the Tjoe Hwie Kiong Temple, Jalan Yos Sudarso, Kediri, East Java, breaking the Klenteng glass. The church bombing in Surabaya on May 13, 2018, and the rejection of church construction in Cilegon city in 2022 (Kemenag RI, 2022). Therefore, it is necessary to instill the value of religious tolerance in students earlier. This makes the foundation for students to respect each other's ethnicity, race, culture, and religion.

Events encountered in the surrounding environment, such as children who make fun of differences in skin color and appearance, create the basis for the need for the introduction of religious tolerance in the lower grades (Mulyana, 2023). Good and effective learning media are needed to enhance the initial reading skills as the beginning of students' footing in opening broad insights into science. Supported by the values of religious tolerance in this learning media, it is the foundation for students to live in peace with fellow religious people without questioning religion, race, ethnicity, and culture.

In the learning process, media is a means to stimulate the student's thoughts, feelings, and willingness. A good learning process can be created so that students can achieve the desired learning objectives (Juneva et al., 2025; Rohman et al., 2019). Learning media can be utilized to convey messages that will attract attention, focus, and emotions during learning activities in order to accomplish a particular learning objective (Rahmayantisa & Rosita, 2023; Tantikasari et al., 2017).

Many previous studies have developed various learning media to help the initial reading process, ranging from interactive digital media (Sholikhah et al., 2025), picture word cards (Dony et al., 2022; Yana & Nasution, 2024), flash card (Paldy et al., 2025), to phonetic aids (Tiani et al., 2023; Westhisi, 2019). The results of this study show that media that is fun and involves students' various senses tends to be more effective in improving early literacy skills. Some approaches also integrate phonics and multisensory methods to speed up mastery of letters and syllables (Dewi, 2015).

Although various media have been developed to improve initial reading skills, most have not systematically integrated character values into the learning process. These media generally still focus on cognitive aspects and rarely explicitly combine literacy learning with the instillation of character values, especially religious tolerance. This critical gap needs to be addressed, considering the importance of early character education in forming inclusive, empathetic, and open individuals who are open to differences.

Through this research, KOPICA (Kotak Pintar Cerdas Aksara) learning media was developed, specifically designed to improve elementary school students' initial reading skills

with a play-while-learning approach. This media is also loaded with content that instills religious tolerance values and positive attitudes such as mutual respect, empathy, and cooperation. This research aimed to develop and implement KOPICA media in initial reading learning and explore students' and teachers' responses to the religious tolerance content inserted in the learning media.

RESEARCH METHOD

Research Design

This research uses the R&D method. It was conducted to produce or develop products and implement them in the classroom. This study uses the ADDIE development model (Analysis, Design, Development, Implementation, and Evaluation) to develop KOPICA learning media to enhance initial reading skills, integrated with religious tolerance for grade I students in Elementary Schools. The ADDIE model procedure can be seen in the following figure.

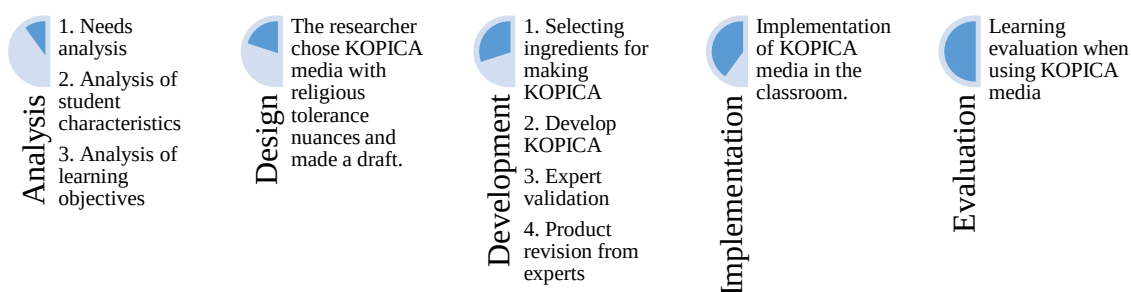


Figure 1. The ADDIE Model Procedure
(Source: Creswell, 2014)

Research Participants

In this research, the participants were 14 first-grade students of MIT Darul Muttaqien Magetan. The research was conducted in the even semester of the 2023/2024 school year. The location was chosen considering that in the school, reading habituation in grade I students is still not optimal, students need an early understanding of religious tolerance, and mainly because there is agreement from all parties, both schools, teachers, and students. This research ensures the safety and confidentiality of student privacy, both in collection and reporting. In addition to seeing the product's effectiveness through learning outcomes, 14 students in this study also provided responses about the product's practicality.

Research Instruments and Data Collection Technique

In this study, data collection techniques are adjusted to the two types of data used: qualitative and quantitative. Qualitative data are obtained through observation and interview activities. Quantitative data collection techniques are designed to assess the validity of the media, the responses of teachers and students in using this media, and the effectiveness of the media. Data are collected through validation sheets given to material and media experts to assess validity. In the validation sheet, several assessment indicators include aspects of the relevance of the media to the initial reading material, the suitability of the content to the level of knowledge and student learning development, the significance of the material to the content of religious tolerance, the quality of the media, design, appearance, and functionality

of the learning media. To ascertain the level of validity, the results were examined by computing the percentage score.

Data were collected through response sheets to see the teacher and students' responses. This questionnaire evaluated the media's ease of use, attractiveness, and usefulness in supporting the learning process and students' understanding of religious tolerance in the media. To ascertain the level of practicality, responses were analyzed in percentages. Then, to see the effectiveness of the media, pre-tests and post-tests were conducted.

By using this data collection technique, this research thoroughly evaluates the validity, practicality, and effectiveness of the product, based on experts' judgment, user responses, and pretest-posttest. Table 1 contains the data collection techniques and instruments.

Table 1.
Data Collection Technique and Instrument

Data	Data Collection Technique	Instrument
Qualitative Data		
Need Analysis and Preliminary Study	Observation and interview guidelines	Observation and Interview
Quantitative Data		
Learning Media Validation	Expert Validation (Expert Judgement)	Validation Sheets
Teacher and Student Responses	User Responses	Response Questionnaires
The Effectiveness of the Media	Pre-test and Post-test	Statistical Data Analysis

Data Analysis

Qualitative data analysis techniques are carried out descriptively and qualitatively with several steps, namely (a) collecting verbal data, (b) recording, collecting, and selecting data, (c) clarifying and analyzing data, and (d) formulating the results to be used in revising the developed media. Meanwhile, quantitative data were analyzed in two stages. The first stage is the analysis of media validation results using the following formula.

$$V_{ah} = \frac{(SV_{a1} + SV_{a2})}{SM} \times 100\%$$

Description:

V_{ah} = Expert validation SV_{a2} = Expert validation 2 score

SV_{a1} = Expert validation 1 score SM = Maximum score

The results of the formula calculation were analyzed to determine the level of validity of the media that had been developed using a Likert scale, as shown in the following table.

Table 2
Percentage Level and Qualification

Percentage Level	Qualification	Description
81 s.d 100%	Very good	Feasible, no revision needed
61 s.d 80%	Good	Worth, no revision needed
41 s.d 60%	Good Enough	Less feasible, revision required
21 sd 40%	Not Good	Not feasible, revision required
Less than 20%	Very Bad	Unfeasible, revision required

RESEARCH FINDINGS AND DISCUSSION

Research Findings

The product of this research is KOPICA learning media integrated with religious tolerance to enhance the initial reading skills of primary school students. In R&D research, there are three stages of development, which will be explained in detail below.

Preliminary Study Stage

Development research using the ADDIE model begins with analysis activities. Initial observations and interviews with teachers and students were conducted at this stage. Activities at this stage aim to identify problems faced in the classroom when reading habituation activities are carried out before teaching and learning hours. The results of observations and interviews were that (a) some students did not read fluently, (b) there was a lack of media use in the process of reading habituation activities, (c) there was a lack of student interest in reading, and (d) there was a lack of knowledge and practice of religious tolerance in students.

Based on these findings, the design stage was conducted. This stage contains concepts that will be made available to the media. The planning that was prepared was (a) sketching the shape of the media, (b) selecting materials, and (c) the material used in the media.

Development Stage

At this stage, researchers began to make media following the sketches that had been designed, editing images, letters, syllables, and connecting words using the CorelDRAW application. At this stage, media development really must be done well. Some points, including religious tolerance content, must also be considered to produce KOPICA learning media with religious tolerance content ready to be validated.

KOPICA (*Kotak Pintar Cerdas Aksara*) is a type of three-dimensional visual media. KOPICA is a learning media specifically designed to enhance students' initial reading skills. This media is in the form of a box containing letter cards, syllables, linking words, punctuation marks, and pictures that are modified to be more interesting for learning, and there are pictures on the box.

Piaget's cognitive theory explains how students adapt to objects and events around them. The theory divides human development into four stages of cognitive development from birth to adulthood. First-grade students belong to the pre-operational stage. Their ability develops by using the symbols of objects around them (Tahir, 2020).

The selection of this media is determined based on the characteristics of students' cognitive development, so that students with difficulties in initial reading can be helped through the KOPICA media. KOPICA learning media is an acronym for KO meaning "Kotak" (box), PI meaning "pintar" (smart), and CA meaning "cerdas aksara" (reading). A box is a place to store something. Generally, a box has a space with square or rectangular sides. The box is made of plywood. The word "pintar" (smart) means it is easy to understand something well. Meanwhile, the word "cerdas aksara" (reading) means understanding the contents of a written text. So, KOPICA means a box to enhance students' reading.

The next step after designing media is validation activities by experts (expert judgement). The validation results from the material, media, and language validators can be seen in the Table 3.

Table 3
The Result of Expert Validity

No.	Validation Aspect	Score				Percentage (%)	Description
		SVa1	SVa2	Mean	Max		

1.	Material Aspect	46	42	44	50	88%	Feasible,	no
							revision	needed
2.	Media Aspect	43	46	44,5	50	89%	Feasible,	no
							revision	needed
3.	Language Aspect	22	22	22	25	88%	Feasible,	no
							revision	needed
Average Number Validation						88,3%	Feasible	and no
							revision	needed

The data shows that the overall validation score is 88.3%. Based on Table 2, a score of 88—100% is included in the “Very Good” qualification, so it is feasible, and no revision is needed. However, there were inputs and suggestions by the validators as qualitative data. So, KOPICA was revised. The following are the results of revisions based on qualitative data: (a) naming each theme in the media; (2) adding a name to the divider box so that the cards are easily returned to their place; (c) changes in the selection of terms in the instruction or user manual; and (d) addition of handles.

Implementation and Evaluation Stage

In this stage, the activities carried out in the subsequent development research are implementation and evaluation. In this report, implementation and evaluation are presented through the responses of product users (students and teachers) and the effectiveness of the media. KOPICA learning media was tested on a group of first-graders. Students and teachers filled out a response sheet to measure its practicality. The following table shows the results of teacher and student responses.

Table 4
Teacher and Student Responses

No.	Validator	Score		Percentage	Description
		Mean	Max		
1.	Teacher	47	50	94%	Very practical
2.	14 Student	9	10	90%	Very practical
Average Number Validation				92%	Very practical

According to Table 4, the average score for the responses from both teachers and students was 92%. Based on these facts, it was determined that this learning media is highly useful and very practical for the educational process.

The effectiveness of this product is seen when the media is implemented in the classroom. Sampling was conducted using the cluster sampling method. Pre-test of an initial reading test was conducted based on indicators, namely (a) students' pronunciation of letters (consonants and vowels), (b) reading fluency, (c) voice clarity in pronouncing words and sentences, and (d) students' intonation in reading. The pre-test determines students' initial reading before using the media. The post-test is used to determine the results and skills of students after using the media. Based on the test, the average pre-test score was 77,2 and the post-test was 87.5. This shows that KOPICA learning media enhance the initial reading skills of the first-grade students. Furthermore, the data was analyzed using t-test analysis with SPSS 19. The following are the results of the calculation using SPSS 19.

Table 5
The Results of the Calculation Using SPSS 19

Paired Differences				T	Df	Sig. (2-tailed)
Mean	Std.	Std.	95% Confidence Interval			

		Deviation	Error	of the Difference				
		n	Mean	Lower	Upper			
Pair 1 Initial Reading Pretest– Initial Reading Posttest	- 10.214 29	3.92582	1.04922	-12.48099	-7.94758	- 9.735	13	.000

Based on the table, the value obtained is $\text{sig} = 0.000$, which means it is smaller than $\alpha 0.05$ ($\text{Sig.} \leq \alpha 0.05$). Thus, H_0 is rejected and H_a is accepted. This means there are differences in students' reading skills before and after using KOPICA learning media. So, KOPICA can enhance the initial reading skills of the first-grader.

Discussion

Reading transcends just visual detection of printed symbols; it constitutes a reflective cognitive process reliant on advanced mental functions, including thinking patterns, assessment, analysis, reasoning, and problem-solving (Alneyadi et al., 2023). The importance of reading activities has led some researchers to conduct a development to improve these skills.

This research is based on previous studies on learning media (Polinda et al., 2023; Rohman et al., 2019) in reading skills (Muda, 2024; Mustika et al., 2023; Nikmah et al., 2025). These studies show that learning media can be used in all learning materials to enhance specific objectives. Smart box learning media cannot only be used in reading skills, but also in understanding the material in Pancasila subjects (Zahra et al., 2024). Learning media is essential in improving reading skills, so students are more interested and focused on practicing their initial reading. These studies show that learning media can improve specific objectives in learning. This study is different from the previous studies because, in addition to improving reading skills, this media is also designed for students to understand religious tolerance from an early age, so that they can practice it in the social environment in the future.

R&D is a form of research that is part of an innovation used to produce and evaluate specific products (García-Valderrama & Mulero-Mendigorry, 2005). This research makes a product of KOPICA media with religious tolerance. The purpose of developing this media is to enhance students' initial reading skills, which have been tested and validated for use with grade I elementary school students.

Many experts believe that learning media should have goals. Learning media should help students better understand concepts, principles, attitudes, and skills (Lince & Burga, 2024), offer diverse and varied learning experiences to pique students' interest in learning (Rosita & Rohmatika, 2019), become a tool in the teaching and learning process to achieve learning objectives (Ediyanto et al., 2024), cultivate specific attitudes and skills (Li et al., 2024; Mardhotillah et al., 2023) and create educational scenarios that students will recall (Yonanda et al., 2024). Based on the learning media's goal, KOPICA media was created with low-grade students' needs in mind. These needs included: (1) the availability of pictures that are relevant to everyday life to make it easier for students to follow reading lessons through the media; (2) the availability of various alternative learning experiences; and (3) the practice of initial reading skills and the development of a religiously tolerant mindset in students.

Based on that description, this study evaluates the validity, practicality, and effectiveness of KOPICA media with religious tolerance to enhance primary school students' initial reading skills. The findings showed that the developed media met the standards based on these three aspects. Validity was established through expert evaluation of materials, media, and language, an essential step in educational research. This is done to ensure that the media can be accurately evaluated in terms of content, design, and language. The assessment given

by experts on the material aspect is 88%, the media aspect is 89%, and 88% also for the language aspect, resulting in an overall validity score of 88.3%. This is in line with the opinion that validity is a key aspect of tracking the quality of a product (Schumann et al., 1995) and ensuring that the product is fit for purpose (Saputri et al., 2023).

Practicality, assessed through teacher and student responses, reached an average of 92%. This shows that the media is ready to be widely implemented. The effectiveness is shown based on the table of paired sample t-test results. The value obtained is $\text{sig} = 0.000$, which means it is smaller than $\alpha 0.05$ ($\text{Sig.} \leq \alpha 0.05$). Thus, H_0 is rejected and H_a is accepted. This means there are differences in students' reading skills before and after using KOPICA learning media. Overall, these results validate KOPICA as a practical and usable tool to assist elementary school students in initial reading. This aligns with opinions that confirmed that the learning media validated and tested for efficacy can capture students' attention, facilitating a fun learning experience (Dony et al., 2022). Similarly, Azzahrah & Rustini (2023) explain that learning media can also make students better understand the material content, including religious tolerance (Rosita et al., 2023). This study corroborates these principles, demonstrating the suitability of KOPICA media for primary school students.

CONCLUSION

The novelty of this research is integrating religious tolerance content in the learning media used to enhance students' initial reading skills. This development proves that media can enhance the learning quality to be engaging, interactive, and fun. It contributes to implementing 21st-century learning that centers learning on students. In addition, this development contributes to introducing religious tolerance values that will benefit students' social lives in the future. The positive results in this study do not make the research perfect. There are several limitations to the research that can be carried out. The limitations of this study are the limited number of samples in one school. In addition, for further research, media development that utilizes technology can be interesting. Based on the results of this study, it can be concluded that learning media with religious tolerance content is very effective in being applied and enhancing students' initial reading and introducing students to the value of religious tolerance. This research shows that using media in learning can help students more easily achieve learning objectives, enrich the learning experience, and generate student enthusiasm and engagement. Thus, using media appropriate to learning objectives and student development is recommended, especially for primary school students transitioning between early and basic education. In order to optimize the use of media in education, this study also recommends training for educators.

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DEVELOPING KOTAK PINTAR CERDAS AKSARA (KOPICA) MEDIA INTEGRATED WITH RELIGIOUS TOLERANCE FOR ENHANCING FIRST-GRADERS' INITIAL READING SKILLS

Article Info

Abstract

The low level of students' initial reading skills and the urgent need to instill religious tolerance hinder the emergence of developing innovative learning media. This study aims to develop KOPICA (Kotak Pintar Cerdas Aksara) to enhance initial reading skills, integrated with religious tolerance and to evaluate its validity and practicality. The research applied the ADDIE development model, which consists of Analysis, Design, Development, Implementation, and Evaluation. Expert validation results showed an overall score of 88.1%, while the practicality assessment by teachers and students indicated an average score of 92%. Data analysis using the Fuzzy Simplex test formula with SPSS 19 resulted in a probability value (Sig.) of 0.000, which is < 0.05, confirming a significant difference and validating the effectiveness of KOPICA. The results of this study lie in the original integration of religious tolerance values into early reading material, making literacy learning a natural vehicle for character formation from the earliest stages of education. The practical implication is that teachers and curriculum developers can utilize KOPICA as an innovative medium that not only strengthens students' literacy skills but also fosters tolerant attitudes in daily classroom practices. This study contributes along with the principles of 21st-century learning that emphasize student-centered approaches, while simultaneously preparing students for harmonious social interactions in the future.

How to cite:

INTRODUCTION

The development of science and technology has brought significant changes in human life economically, socially, culturally, and educationally (Orak & Ismail, 2021; Yulianti, 2019). From that opinion, education is a place to gain knowledge and develop literacy skills. One type of literacy that is important in the learning process is reading. By reading, one can find out various things that are not yet known (Laili et al., 2021). Reading is a collection of several activities, such as recognizing letters and words and connecting sounds, to provide a conclusion to the reading. Reading is essential in life, and Widiyastuti argues that students' success in the learning process is determined by their mastery of reading skills (Hardiyanti, 2022).

Initial reading is the beginning stage in the reading process, which includes stringing letters, translating written symbols into sounds, and visual processes (Akhar et al., 2024; Chumaidi & Sukardi, 2023). An initial reading is crucial for students because it will make it easier to accept the learning provided by the teacher. The better students master the skills of initial reading, the better they will absorb the knowledge contained in various media (Muda, 2024).

Problems in early reading learning in elementary schools are still challenging for many educators. Students often struggle to recognize letters, connect letters with sounds, and understand the meaning of words being read (Septian et al., 2023). Monotonous media and the lack of active student involvement in learning exacerbate this (Muhartanto et al., 2024). In addition, character education, such as tolerance, mutual respect, and other social values, is often missed in learning that focuses solely on academic achievement.

Based on the previous study, many religious conflicts have occurred in Indonesia, so religious tolerance must be taught early (Rostita et al., 2023). Cases of intolerance that occurred in Indonesia, such as the attack on the Klenzing on January 13, 2018—a man using a motorcycle broke into the Tjoe Hwie Kiong Temple, Yos Sudarso Road, Kediri, East Java, breaking the Klenzing glass; the church bombing in Surabaya on May 13, 2018; and the rejection of church construction in Ciligon city in 2022 (Kusneng R, 2022). Therefore, it is necessary to instill the value of religious tolerance in students earlier. This makes the foundation for students to respect each other's ethnicity, race, culture, and religion. Events encountered in the surrounding environment, such as children who make fun of differences in skin color and appearance, create the basis for the need for the introduction of religious tolerance in the lower grades (Mulyana, 2021).

Good and effective learning media are needed to enhance the initial reading skills at the beginning of students' footing in opening broad insights into science. Supported by the values of religious tolerance in this learning media, it is the foundation for students to live in peace with fellow religious people without questioning religion, race, ethnicity, and culture. This unique contribution, integrating religious tolerance directly into reading instruction, makes KOPICA not only a literacy tool but also a vehicle for early character education, something rarely achieved by previous approaches.

In the learning process, media is a means to stimulate the student's thoughts, feelings, and willingness. A good learning process can be created so that students can achieve the desired learning objectives (Juaeva et al., 2025; Rohman et al., 2019). Learning media can be utilized to convey messages that will attract attention, focus, and emotions during learning activities in order to accomplish a particular learning objective (Rahmawati & Rostita, 2023; Tantiakari et al., 2017).

Many previous studies have developed various learning media to help the initial reading process, ranging from interactive digital media (Sholikhah et al., 2023), picture word cards (Dony et al., 2022; Yana & Nantono, 2024), flash card (Paldi et al., 2025), to phonetic aids (Triani et al., 2022; Wuthini, 2019). The results of this study show that media that is fun and involves students' various senses tends to be more effective in improving early literacy skills. Some approaches also integrate phonics and multisensory methods to speed up mastery of letters and syllables (Dewi, 2015).

Although various media have been developed to improve initial reading skills, most have not systematically integrated character values into the learning process; these media generally still focus on cognitive aspects and rarely explicitly combine literacy learning with the instillation of character values, especially religious tolerance. This gap highlights the originality of this research, which for the first time symbols religious tolerance values

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Based on data from the Program for International Student Assessment (PISA) released by the Organization for Economic Co-operation and Development (OECD), Indonesia ranks 62nd out of 70 countries with low literacy levels. In the Alibaca index, East Java Province is

ranked 9th from the bottom, including the provinces in Indonesia with the lower literacy levels. The data proves that literacy or reading skills in Indonesia are deficient. In fact, among 34 provinces, East Java has the lowest literacy level (Depdikbud, 2019).

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Although various media have been developed to improve initial reading skills, most have not systematically integrated character values into the learning process. these media generally still focus on cognitive aspects and rarely explicitly combine literacy learning with the instillation of character values, especially religious tolerance. **This gap highlights the originality of this research, which for the first time embeds religious tolerance values systematically within early reading instruction. By doing so, the study addresses both the academic need for stronger literacy foundations and the social need for tolerance cultivation among young learners.**

Through this research, KOPICA (Kotak Pintar Cerdas Aksara) learning media was developed, specifically designed to improve elementary school students' initial reading skills

with a play-while-learning approach. This media is also loaded with content that instills religious tolerance values and positive attitudes such as mutual respect, empathy, and cooperation. Thus, the research not only responds to the gap identified in previous studies but also offers a novel educational contribution that integrates literacy skills with character development. This research aimed to develop and implement KOPICA media in initial reading learning and explore students' and teachers' responses to the religious tolerance content inserted in the learning media.

RESEARCH METHOD

Research Design

This research uses the R&D method. It was conducted to produce or develop products and implement them in the classroom. This study uses the ADDIE development model (Analysis, Design, Development, Implementation, and Evaluation) to develop KOPICA learning media to enhance initial reading skills, integrated with religious tolerance for grade I students in Elementary Schools. The ADDIE model offers a systematic and flexible framework that guides product development from needs analysis to evaluation. As noted by Branch (2009), ADDIE is widely applied in instructional design for its clarity and adaptability, while Molenda highlights its strength in ensuring alignment between objectives, materials, and assessments (Molenda, 2015). Thus, ADDIE is considered suitable for developing KOPICA as a medium that integrates literacy skills with religious tolerance values. The ADDIE model procedure can be seen in the following figure.

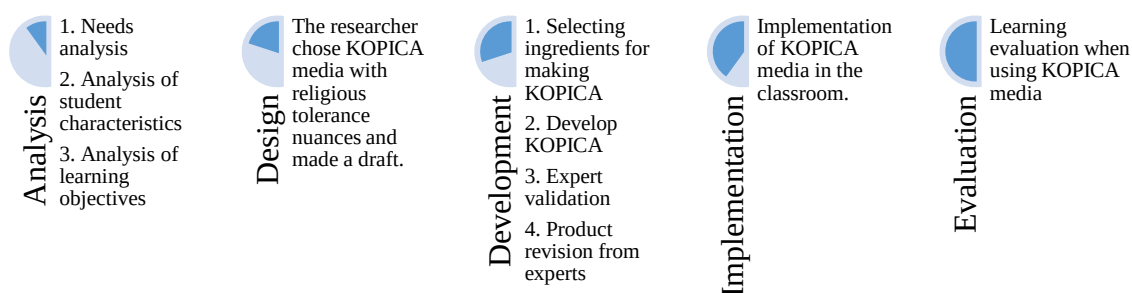


Figure 1. The ADDIE Model Procedure
(Source: Creswell, 2014)

Research Participants

In this research, the participants were 14 first-grade students of MIT Darul Muttaqien Magetan. The research was conducted in the even semester of the 2023/2024 school year. The location was chosen considering that in the school, reading habituation in grade I students is still not optimal, students need an early understanding of religious tolerance, and mainly because there is agreement from all parties, both schools, teachers, and students. Preliminary observations showed that most students had a low level of initial reading skills, such as difficulties in recognizing letters and combining syllables into words. Furthermore, students had limited exposure to interactive or innovative learning media, as classroom instruction still relied heavily on conventional textbooks and rote methods. This research ensures the safety and confidentiality of student privacy, both in collection and reporting. In addition to seeing the product's effectiveness through learning outcomes, 14 students in this study also provided responses about the product's practicality.

Research Instruments and Data Collection Technique

In this study, data collection techniques are adjusted to the two types of data used: qualitative and quantitative. Qualitative data are obtained through observation and interview activities. Quantitative data collection techniques are designed to assess the validity of the media, the responses of teachers and students in using this media, and the effectiveness of the media. Data are collected through validation sheets given to material and media experts to assess validity. In the validation sheet, several assessment indicators include aspects of the relevance of the media to the initial reading material, the suitability of the content to the level of knowledge and student learning development, the significance of the material to the content of religious tolerance, the quality of the media, design, appearance, and functionality of the learning media. To ascertain the level of validity, the results were examined by computing the percentage score.

Data were collected through response sheets to see the teacher and students' responses. This questionnaire evaluated the media's ease of use, attractiveness, and usefulness in supporting the learning process and students' understanding of religious tolerance in the media. To ascertain the level of practicality, responses were analyzed in percentages. Then, to see the effectiveness of the media, pre-tests and post-tests were conducted.

By using this data collection technique, this research thoroughly evaluates the validity, practicality, and effectiveness of the product, based on experts' judgment, user responses, and pretest-posttest. Table 1 contains the data collection techniques and instruments.

Table 1.
Data Collection Technique and Instrument

Data	Data Collection Technique	Instrument
Qualitative Data		
Need Analysis and Preliminary Study	Observation and interview guidelines	Observation and Interview
Quantitative Data		
Learning Media Validation	Expert Validation (Expert Judgement)	Validation Sheets
Teacher and Student Responses	User Responses	Response Questionnaires
The Effectiveness of the Media	Pre-test and Post-test	Statistical Data Analysis

Data Analysis

Qualitative data analysis techniques are carried out descriptively and qualitatively with several steps, namely (a) collecting verbal data, by obtaining responses and comments from students, teachers, and experts during observation and interviews; (b) recording, collecting, and selecting data, by transcribing relevant information and filtering data that align with the research focus; (c) clarifying and analyzing data, by grouping similar themes, identifying patterns, and interpreting meanings related to media effectiveness and practicality; and (d) formulating the results, by drawing conclusions that serve as the basis for revising and improving the developed media. Meanwhile, quantitative data were analyzed in two stages. The first stage is the analysis of media validation results using the following formula.

$$V_{ah} = \frac{(SV_{a1} + SV_{a2})}{SM} \times 100\%$$

Description:

V_{ah} = Expert validation SV_{a2} = Expert validation 2 score
 SV_{a1} = Expert validation 1 score SM = Maximum score

The results of the formula calculation were analyzed to determine the level of validity of the media that had been developed using a Likert scale, as shown in the following table.

Table 2
Percentage Level and Qualification

Percentage Level	Qualification	Description
81 s.d 100%	Very good	Feasible, no revision needed
61 s.d 80%	Good	Worth, no revision needed
41 s.d 60%	Good Enough	Less feasible, revision required
21 sd 40%	Not Good	Not feasible, revision required
Less than 20%	Very Bad	Unfeasible, revision required

RESEARCH FINDINGS AND DISCUSSION

Research Findings

The product of this research is KOPICA learning media integrated with religious tolerance to enhance the initial reading skills of primary school students. In R&D research, there are three stages of development, which will be explained in detail below.

Preliminary Study Stage

Development research using the ADDIE model begins with analysis activities. Initial observations and interviews with teachers and students were conducted at this stage. Activities at this stage aim to identify problems faced in the classroom when reading habituation activities are carried out before teaching and learning hours. The results of observations and interviews were that (a) some students did not read fluently, (b) there was a lack of media use in the process of reading habituation activities, (c) there was a lack of student interest in reading, and (d) there was a lack of knowledge and practice of religious tolerance in students.

Based on these findings, the design stage was conducted. This stage contains concepts that will be made available to the media. The planning that was prepared was (a) sketching the shape of the media, (b) selecting materials, and (c) the material used in the media.

Development Stage

At this stage, researchers began to make media following the sketches that had been designed, editing images, letters, syllables, and connecting words using the CorelDRAW application. At this stage, media development really must be done well. Some points, including religious tolerance content, must also be considered to produce KOPICA learning media with religious tolerance content ready to be validated.

KOPICA (*Kotak Pintar Cerdas Aksara*) is a type of three-dimensional visual media. KOPICA is a learning media specifically designed to enhance students' initial reading skills. This media is in the form of a box containing letter cards, syllables, linking words, punctuation marks, and pictures that are modified to be more interesting for learning, and there are pictures on the box.

Piaget's cognitive theory explains how students adapt to objects and events around them. The theory divides human development into four stages of cognitive development from birth to adulthood. First-grade students belong to the pre-operational stage. Their ability develops by using the symbols of objects around them (Tahir, 2020).

The selection of this media is determined based on the characteristics of students' cognitive development, so that students with difficulties in initial reading can be helped through the KOPICA media. KOPICA learning media is an acronym for KO meaning

“Kotak” (box), PI meaning “pintar” (smart), and CA meaning “cerdas aksara” (reading). A box is a place to store something. Generally, a box has a space with square or rectangular sides. The box is made of plywood. The word “pintar” (smart) means it is easy to understand something well. Meanwhile, the word “cerdas aksara” (reading) means understanding the contents of a written text. So, KOPICA means a box to enhance students’ reading.

The next step after designing media is validation activities by experts (expert judgement). The validation results from the material, media, and language validators can be seen in the Table 3.

Table 3
The Result of Expert Validity

No.	Validation Aspect	Score				Percentage (%)	Description
		SVa1	SVa2	Mean	Max		
1.	Material Aspect	46	42	44	50	88%	Feasible, no revision needed
2.	Media Aspect	43	46	44,5	50	89%	Feasible, no revision needed
3.	Language Aspect	22	22	22	25	88%	Feasible, no revision needed
Average Number Validation						88,3%	Feasible and no revision needed

The data shows that the overall validation score is 88.3%. Based on Table 2, a score of 88—100% is included in the “Very Good” qualification, so it is feasible, and no revision is needed. However, there were inputs and suggestions by the validators as qualitative data. So, KOPICA was revised. The following are the results of revisions based on qualitative data: (a) naming each theme in the media; (2) adding a name to the divider box so that the cards are easily returned to their place; (c) changes in the selection of terms in the instruction or user manual; and (d) addition of handles.

Implementation and Evaluation Stage

In this stage, the activities carried out in the subsequent development research are implementation and evaluation. In this report, implementation and evaluation are presented through the responses of product users (students and teachers) and the effectiveness of the media. KOPICA learning media was tested on a group of first-graders. Students and teachers filled out a response sheet to measure its practicality. The following table shows the results of teacher and student responses.

Table 4
Teacher and Student Responses

No.	Validator	Score		Percentage	Description
		Mean	Max		
1.	Teacher	47	50	94%	Very practical
2.	14 Student	9	10	90%	Very practical
Average Number Validation				92%	Very practical

According to Table 4, the average score for the responses from both teachers and students was 92%. Based on these facts, it was determined that this learning media is highly useful and very practical for the educational process.

The effectiveness of this product is seen when the media is implemented in the classroom. Sampling was conducted using the cluster sampling method. Pre-test of an initial reading test was conducted based on indicators, namely (a) students' pronunciation of letters (consonants and vowels), (b) reading fluency, (c) voice clarity in pronouncing words and

sentences, and (d) students' intonation in reading. The pre-test determines students' initial reading before using the media. The post-test is used to determine the results and skills of students after using the media. Based on the test, the average pre-test score was 77,2 and the post-test was 87.5 as seen in following figure.

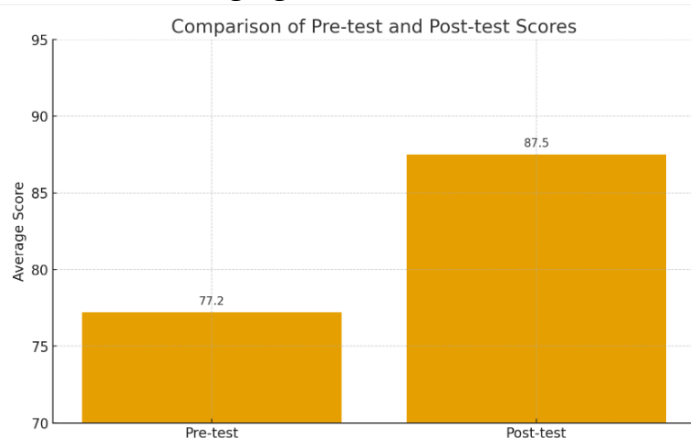


Figure 1 Comparison of Pre-test and Post-test Scores

This shows that KOPICA learning media enhance the initial reading skills of the first-grade students. Furthermore, the data was analyzed using t-test analysis with SPSS 19. The following are the results of the calculation using SPSS 19.

Table 5
The Results of the Calculation Using SPSS 19

The Results of the Calculation Using SPSS 15						T	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Initial Reading Pretest– Initial Reading Posttest	-10.21429	3.92582	1.04922	-12.48099	-7.94758	-9.735	13	.000

Based on the table, the value obtained is sig = 0.000, which means it is smaller than α 0.05 (Sig. $\leq \alpha$ 0.05). Thus, H_0 is rejected and H_a is accepted. This means there are differences in students' reading skills before and after using KOPICA learning media. So, KOPICA can enhance the initial reading skills of the first-grader.

Discussion

Reading transcends just visual detection of printed symbols; it constitutes a reflective cognitive process reliant on advanced mental functions, including thinking patterns, assessment, analysis, reasoning, and problem-solving (Alneyadi et al., 2023). The importance of reading activities has led some researchers to conduct a development to improve these skills.

This research is based on previous studies on learning media (Polinda et al., 2023; Rohman et al., 2019) in reading skills (Muda, 2024; Mustika et al., 2023; Nikmah et al., 2025). These studies show that learning media can be used in all learning materials to enhance specific objectives. Smart box learning media cannot only be used in reading skills, but also in understanding the material in Pancasila subjects (Zahra et al., 2024). Learning media is

essential in improving reading skills, so students are more interested and focused on practicing their initial reading. These studies show that learning media can improve specific objectives in learning. This study is different from the previous studies because, in addition to improving reading skills, this media is also designed for students to understand religious tolerance from an early age, so that they can practice it in the social environment in the future.

R&D is a form of research that is part of an innovation used to produce and evaluate specific products (García-Valderrama & Mulero-Mendigorri, 2005). This research makes a product of KOPICA media with religious tolerance. The purpose of developing this media is to enhance students' initial reading skills, which have been tested and validated for use with grade I elementary school students. In line with the research objective, the development process involved expert validation, revisions, and implementation in the classroom, ensuring that KOPICA could be applied effectively to achieve literacy outcomes.

Many experts believe that learning media should have goals. Learning media should help students better understand concepts, principles, attitudes, and skills (Lince & Burga, 2024), offer diverse and varied learning experiences to pique students' interest in learning (Rosita & Rohmatika, 2019), become a tool in the teaching and learning process to achieve learning objectives (Ediyanto et al., 2024), cultivate specific attitudes and skills (Li et al., 2024; Mardhotillah et al., 2023) and create educational scenarios that students will recall (Yonanda et al., 2024). Based on the learning media's goal, KOPICA media was created with low-grade students' needs in mind. These needs included: (1) the availability of pictures that are relevant to everyday life to make it easier for students to follow reading lessons through the media; (2) the availability of various alternative learning experiences; and (3) the practice of initial reading skills and the development of a religiously tolerant mindset in students. This directly connects with the research aim of exploring how literacy learning can simultaneously cultivate tolerance values in young learners.

Based on that description, this study evaluates the validity, practicality, and effectiveness of KOPICA media with religious tolerance to enhance primary school students' initial reading skills. The findings showed that the developed media met the standards based on these three aspects. Validity was established through expert evaluation of materials, media, and language, an essential step in educational research. This is done to ensure that the media can be accurately evaluated in terms of content, design, and language. The assessment given by experts on the material aspect is 88%, the media aspect is 89%, and 88% also for the language aspect, resulting in an overall validity score of 88.3%. This is in line with the opinion that validity is a key aspect of tracking the quality of a product (Schumann et al., 1995) and ensuring that the product is fit for purpose (Saputri et al., 2023).

Practicality, assessed through teacher and student responses, reached an average of 92%. This shows that the media is ready to be widely implemented. The effectiveness is shown based on the table of paired sample t-test results. The value obtained is $\text{sig} = 0.000$, which means it is smaller than $\alpha 0.05$ ($\text{Sig.} \leq \alpha 0.05$). Thus, H_0 is rejected and H_a is accepted. This means there are differences in students' reading skills before and after using KOPICA learning media. Overall, these results validate KOPICA as a practical and usable tool to assist elementary school students in initial reading. This aligns with opinions that confirmed that the learning media validated and tested for efficacy can capture students' attention, facilitating a fun learning experience (Dony et al., 2022). Similarly, Azzahrah & Rustini (2023) explain that learning media can also make students better understand the material content, including religious tolerance (Rosita et al., 2023). This study corroborates these principles, demonstrating the suitability of KOPICA media for primary school students. In addition, the objective of exploring students' and teachers' responses to the religious tolerance content was achieved, as both groups positively acknowledged the relevance and

importance of such values, recognizing KOPICA not only as a literacy tool but also as a medium for character development.

CONCLUSION

The novelty of this research lies in integrating religious tolerance content into learning media designed to enhance students' initial reading skills. This development proves that media can improve learning quality by making it more engaging, interactive, and fun. It contributes to the implementation of 21st-century learning that emphasizes student-centered approaches while simultaneously introducing values of religious tolerance that will benefit students' social lives in the future. The practical implication is that educators and administrators can adopt KOPICA as an innovative medium to strengthen literacy instruction while embedding character education, and schools can use this model to design broader programs that combine academic and value-based learning. Despite the positive results, this study acknowledges its limitations, particularly the small sample size from only one school, which restricts the generalizability of the findings. Therefore, further studies with larger and more diverse participant groups are necessary to strengthen the evidence base. Future research is also recommended to explore the scalability of KOPICA across different educational contexts and to integrate digital technology into the media, allowing for more dynamic interaction and wider accessibility. Based on the results of this study, it can be concluded that learning media with religious tolerance content is very effective in being applied and enhancing students' initial reading and introducing students to the value of religious tolerance. This research shows that using media in learning can help students more easily achieve learning objectives, enrich the learning experience, and generate student enthusiasm and engagement. Thus, using media appropriate to learning objectives and student development is recommended, especially for primary school students transitioning between early and basic education. In order to optimize the use of media in education, this study also recommends training for educators.

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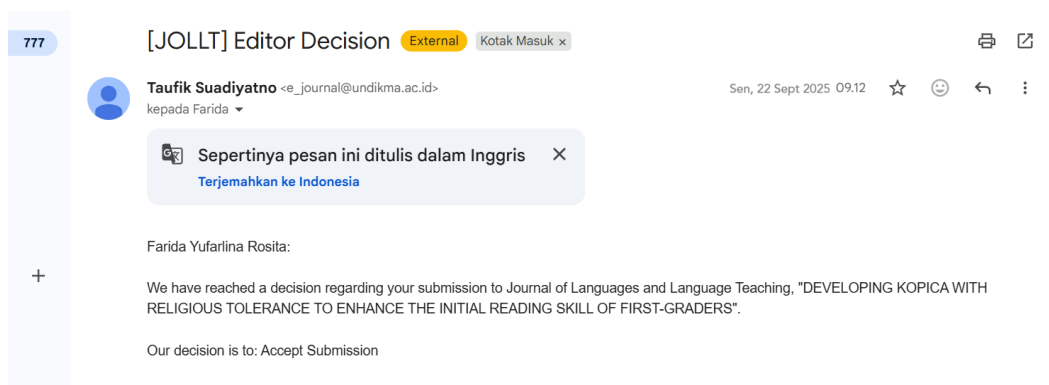
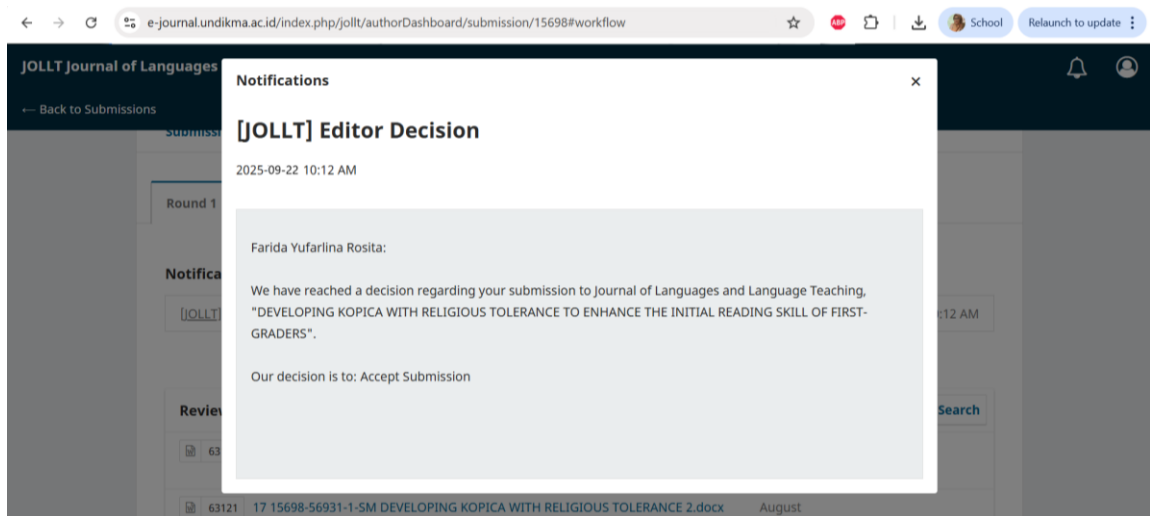
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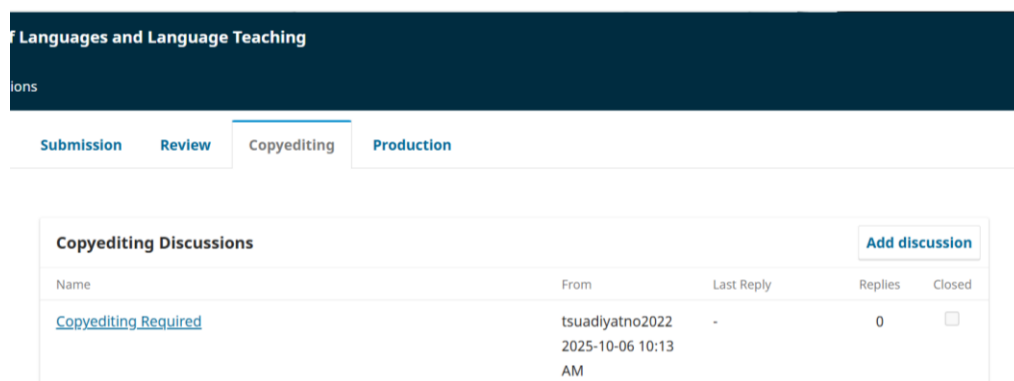
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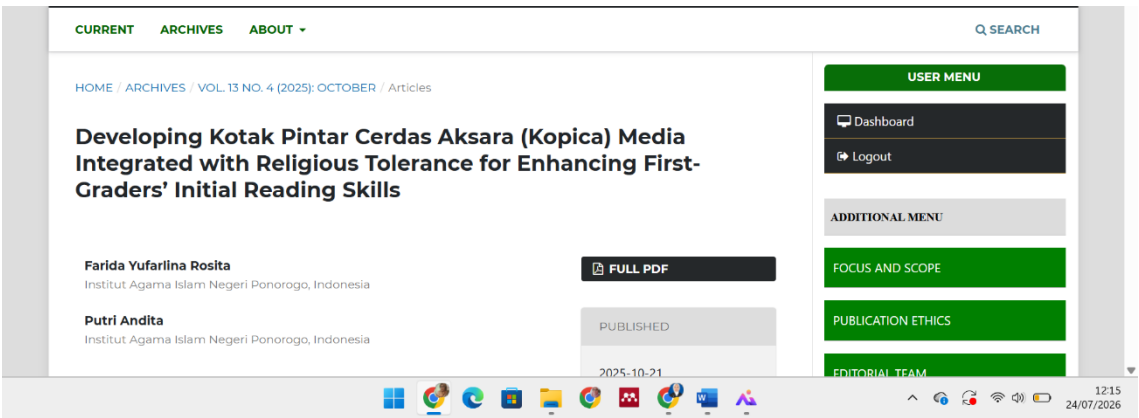
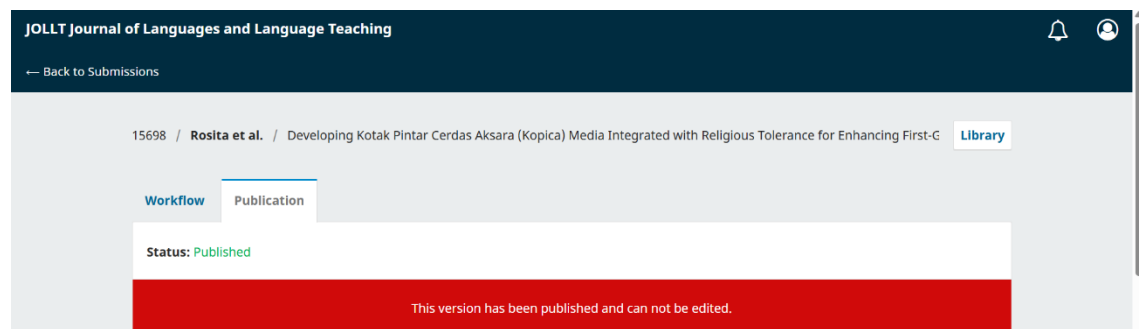
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DEVELOPING *KOTAK PINTAR CERDAS AKSARA* (KOPICA) MEDIA INTEGRATED WITH RELIGIOUS TOLERANCE FOR ENHANCING FIRST-GRADERS' INITIAL READING SKILLS

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Article Info	Abstract
Article History Received: May 2025 Revised: August 2025 Accepted: September 2025 Published: October 2025	<i>The low level of students' initial reading skills and the urgent need to instill religious tolerance highlight the importance of developing innovative learning media. This study aims to develop KOPICA (Kotak Pintar Cerdas Aksara) to enhance initial reading skills integrated with religious tolerance and to evaluate its validity and practicality. The research applied the ADDIE development model, which consists of Analysis, Design, Development, Implementation, and Evaluation. Expert validation results showed an overall score of 88.3%, while the practicality assessment by teachers and students indicated an average score of 92%. Data analysis using the Paired Samples t-test formula with SPSS 19 revealed a probability value (Sig) of 0.000, which is ≤ 0.05, confirming a significant difference and validating the effectiveness of KOPICA. The novelty of this study lies in the original integration of religious tolerance values into early reading materials, making literacy learning a natural vehicle for character formation from the earliest stages of education. The practical implication is that teachers and curriculum developers can utilize KOPICA as an innovative medium that not only strengthens students' literacy skills but also fosters tolerant attitudes in daily classroom practices. This dual contribution aligns with the principles of 21st-century learning that emphasize student-centered approaches, while simultaneously preparing students for harmonious social interactions in the future.</i>
Keywords KOPICA media; Teaching media; Initial reading skills; Religious tolerance; Learning model;	
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INTRODUCTION

The development of science and technology has brought significant changes in human life economically, socially, culturally, and educationally (Orak & İnözü, 2021; Yulianti, 2019). From that opinion, education is a place to gain knowledge and develop literacy skills. One type of literacy that is important in the learning process is reading. By reading, one can find out various things that are not yet known (Laila et al., 2021). Reading is a collection of several activities, such as recognizing letters and words and connecting sounds, to provide a conclusion to the reading. Reading is essential in life, and Washburn argues that students' success in the learning process is determined by their mastery of reading skills (Hardiyanti, 2022).

Initial reading is the beginning stage in the reading process, which includes stringing letters, translating written symbols into sounds, and visual processes (Akbar et al., 2024; Chumairoh & Sukardi, 2023). An initial reading is crucial for students because it will make it easier to accept the learning provided by the teacher. The better students master the skills of initial reading, the better they will absorb the knowledge contained in writing (Muda, 2024).

Thus, students must have good initial reading skills and learn well in the classroom. Initial reading skills are also the foundation for students to understand various sciences.

Based on data from the Program for International Student Assessment (PISA) released by the Organization for Economic Co-operation and Development (OECD), Indonesia ranks 62nd out of 70 countries with low literacy levels. In the Alibaca index, East Java Province is ranked 9th from the bottom, including the provinces in Indonesia with the lower literacy levels. The data proves that literacy or reading skills in Indonesia are deficient. In fact, among 34 provinces, East Java has the lowest literacy level (Depdikbud, 2019).

Problems in early reading learning in elementary schools are still challenging for many educators. Students often struggle to recognize letters, connect letters with sounds, and understand the meaning of words being read (Septiani et al., 2023). Monotonous media and the lack of active student involvement in learning exacerbate this (Mashartanto et al., 2024). In addition, character education, such as tolerance, mutual respect, and other social values, is often missed in learning that focuses solely on academic achievement.

Based on the previous study, many religious conflicts have occurred in Indonesia, so religious tolerance must be taught early (Rosita et al., 2023). Cases of intolerance that occurred in Indonesia, such as the attack on the Klenteng on January 13, 2018—a man using a motorcycle broke into the Tjoe Hwie Kiong Temple, Yos Sudarso Road, Kediri, East Java, breaking the Klenteng glass; the church bombing in Surabaya on May 13, 2018; and the rejection of church construction in Cilegon city in 2022 (Kemenag RI, 2022). Therefore, it is necessary to instill the value of religious tolerance in students earlier. This makes the foundation for students to respect each other's ethnicity, race, culture, and religion. Events encountered in the surrounding environment, such as children who make fun of differences in skin color and appearance, create the basis for the need for the introduction of religious tolerance in the lower grades (Mulyana, 2023).

Good and effective learning media are needed to enhance the initial reading skills as the beginning of students' footing in opening broad insights into science. Supported by the values of religious tolerance in this learning media, it is the foundation for students to live in peace with fellow religious people without questioning religion, race, ethnicity, and culture. This unique contribution, integrating religious tolerance directly into reading instruction, makes KOPICA not only a literacy tool but also a vehicle for early character education, something rarely achieved by previous approaches.

In the learning process, media is a means to stimulate the student's thoughts, feelings, and willingness. A good learning process can be created so that students can achieve the desired learning objectives (Juneva et al., 2025; Rohman et al., 2019). Learning media can be utilized to convey messages that will attract attention, focus, and emotions during learning activities in order to accomplish a particular learning objective (Rahmayantisa & Rosita, 2023; Tantikasari et al., 2017).

Many previous studies have developed various learning media to help the initial reading process, ranging from interactive digital media (Sholikhah et al., 2025), picture word cards (Dony et al., 2022; Yana & Nasution, 2024), flash card (Paldy et al., 2025), to phonetic aids (Tiani et al., 2023; Westhisi, 2019). The results of this study show that media that is fun and involves students' various senses tends to be more effective in improving early literacy skills. Some approaches also integrate phonics and multisensory methods to speed up mastery of letters and syllables (Dewi, 2015).

Although various media have been developed to improve initial reading skills, most have not systematically integrated character values into the learning process. These media generally still focus on cognitive aspects and rarely explicitly combine literacy learning with the instillation of character values, especially religious tolerance. This gap highlights the originality of this research, which for the first time embeds religious tolerance values

systematically within early reading instruction. By doing so, the study addresses both the academic need for stronger literacy foundations and the social need for tolerance cultivation among young learners.

Through this research, KOPICA (Kotak Pintar Cerdas Aksara) learning media was developed, specifically designed to improve elementary school students' initial reading skills with a play-while-learning approach. This media is also loaded with content that instills religious tolerance values and positive attitudes such as mutual respect, empathy, and cooperation. Thus, the research not only responds to the gap identified in previous studies but also offers a novel educational contribution that integrates literacy skills with character development. This research aimed to develop and implement KOPICA media in initial reading learning and explore students' and teachers' responses to the religious tolerance content inserted in the learning media.

RESEARCH METHOD

Research Design

This research uses the R&D method. It was conducted to produce or develop products and implement them in the classroom. This study uses the ADDIE development model (Analysis, Design, Development, Implementation, and Evaluation) to develop KOPICA learning media to enhance initial reading skills, integrated with religious tolerance for grade I students in Elementary Schools. The ADDIE model offers a systematic and flexible framework that guides product development from needs analysis to evaluation. As noted by Branch (2009), ADDIE is widely applied in instructional design for its clarity and adaptability, while Molenda highlights its strength in ensuring alignment between objectives, materials, and assessments (Molenda, 2015). Thus, ADDIE is considered suitable for developing KOPICA as a medium that integrates literacy skills with religious tolerance values. The ADDIE model procedure can be seen in the following figure.

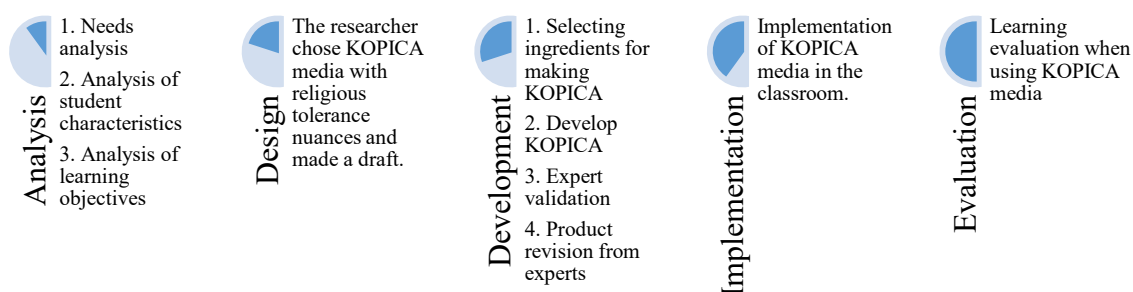


Figure 1. The ADDIE Model Procedure
(Source: Creswell, 2014)

Research Participants

In this research, the participants were 14 first-grade students of MIT Darul Muttaqien Magetan. The research was conducted in the even semester of the 2023/2024 school year. The location was chosen considering that in the school, reading habituation in grade I students is still not optimal, students need an early understanding of religious tolerance, and mainly because there is agreement from all parties, both schools, teachers, and students. Preliminary observations showed that most students had a low level of initial reading skills, such as difficulties in recognizing letters and combining syllables into words. Furthermore, students had limited exposure to interactive or innovative learning media, as classroom instruction still relied heavily on conventional textbooks and rote methods. This research ensures the safety

and confidentiality of student privacy, both in collection and reporting. In addition to seeing the product's effectiveness through learning outcomes, 14 students in this study also provided responses about the product's practicality.

Research Instruments and Data Collection Technique

In this study, data collection techniques are adjusted to the two types of data used: qualitative and quantitative. Qualitative data are obtained through observation and interview activities. Quantitative data collection techniques are designed to assess the validity of the media, the responses of teachers and students in using this media, and the effectiveness of the media. Data are collected through validation sheets given to material and media experts to assess validity. In the validation sheet, several assessment indicators include aspects of the relevance of the media to the initial reading material, the suitability of the content to the level of knowledge and student learning development, the significance of the material to the content of religious tolerance, the quality of the media, design, appearance, and functionality of the learning media. To ascertain the level of validity, the results were examined by computing the percentage score.

Data were collected through response sheets to see the teacher and students' responses. This questionnaire evaluated the media's ease of use, attractiveness, and usefulness in supporting the learning process and students' understanding of religious tolerance in the media. To ascertain the level of practicality, responses were analyzed in percentages. Then, to see the effectiveness of the media, pre-tests and post-tests were conducted.

By using this data collection technique, this research thoroughly evaluates the validity, practicality, and effectiveness of the product, based on experts' judgment, user responses, and pretest-posttest. Table 1 contains the data collection techniques and instruments.

Table 1.
Data Collection Technique and Instrument

Data	Data Collection Technique	Instrument
Qualitative Data		
Need Analysis and Preliminary Study	Observation and interview guidelines	Observation and Interview
Quantitative Data		
Learning Media Validation	Expert Validation (Expert Judgement)	Validation Sheets
Teacher and Student Responses	User Responses	Response Questionnaires
The Effectiveness of the Media	Pre-test and Post-test	Statistical Data Analysis

Data Analysis

The qualitative data analysis in this study follows a systematic and interpretive process aimed at revealing the meaning behind participants' experiences and responses. The analysis begins with collecting verbal data, where researchers gather in-depth comments, reflections, and perceptions from students, teachers, and experts during observations and interviews. These responses form the foundation for understanding how participants perceive the developed media. Next, the process of recording, collecting, and selecting data ensures that only relevant and meaningful information is transcribed, organized, and filtered according to the research objectives. The clarification and analysis phase involves coding and categorizing data into emerging themes, identifying patterns, and linking them to aspects such as the media's effectiveness, practicality, and user engagement. This stage emphasizes interpretation rather than mere description, highlighting the contextual significance of findings. Finally, researchers formulate conclusions by synthesizing insights into coherent interpretations that

inform revisions and improvements of the media product. Meanwhile, the quantitative analysis complements this process through two stages: first, analyzing the results of media validation using expert ratings; and second, determining the validity level of the developed media through a Likert-scale assessment, which quantitatively supports the qualitative interpretations.

Table 2
Percentage Level and Qualification

Percentage Level	Qualification	Description
81 s.d 100%	Very good	Feasible, no revision needed
61 s.d 80%	Good	Worth, no revision needed
41 s.d 60%	Good Enough	Less feasible, revision required
21 sd 40%	Not Good	Not feasible, revision required
Less than 20%	Very Bad	Unfeasible, revision required

RESEARCH FINDINGS AND DISCUSSION

Research Findings

The product of this research is KOPICA learning media integrated with religious tolerance to enhance the initial reading skills of primary school students. In R&D research, there are three stages of development, which will be explained in detail below.

Preliminary Study Stage

Development research using the ADDIE model begins with analysis activities. Initial observations and interviews with teachers and students were conducted at this stage. Activities at this stage aim to identify problems faced in the classroom when reading habituation activities are carried out before teaching and learning hours. The results of observations and interviews were that (a) some students did not read fluently, (b) there was a lack of media use in the process of reading habituation activities, (c) there was a lack of student interest in reading, and (d) there was a lack of knowledge and practice of religious tolerance in students.

Based on these findings, the design stage was conducted. This stage contains concepts that will be made available to the media. The planning that was prepared was (a) sketching the shape of the media, (b) selecting materials, and (c) the material used in the media.

Development Stage

At this stage, researchers began to make media following the sketches that had been designed, editing images, letters, syllables, and connecting words using the CorelDRAW application. At this stage, media development really must be done well. Some points, including religious tolerance content, must also be considered to produce KOPICA learning media with religious tolerance content ready to be validated.

KOPICA (*Kotak Pintar Cerdas Aksara*) is a type of three-dimensional visual media. KOPICA is a learning media specifically designed to enhance students' initial reading skills. This media is in the form of a box containing letter cards, syllables, linking words, punctuation marks, and pictures that are modified to be more interesting for learning, and there are pictures on the box.

Piaget's cognitive theory explains how students adapt to objects and events around them. The theory divides human development into four stages of cognitive development from birth to adulthood. First-grade students belong to the pre-operational stage. Their ability develops by using the symbols of objects around them (Tahir, 2020).

The selection of this media is determined based on the characteristics of students' cognitive development, so that students with difficulties in initial reading can be helped

through the KOPICA media. KOPICA learning media is an acronym for KO meaning “Kotak” (box), PI meaning “pintar” (smart), and CA meaning “cerdas aksara” (reading). A box is a place to store something. Generally, a box has a space with square or rectangular sides. The box is made of plywood. The word “pintar” (smart) means it is easy to understand something well. Meanwhile, the word “cerdas aksara” (reading) means understanding the contents of a written text. So, KOPICA means a box to enhance students’ reading.

The next step after designing media is validation activities by experts (expert judgement). The validation results from the material, media, and language validators can be seen in the Table 3.

Table 3
The Result of Expert Validity

No.	Validation Aspect	Score				Percentage (%)	Description
		SVa1	SVa2	Mean	Max		
1.	Material Aspect	46	42	44	50	88%	Feasible, no revision needed
2.	Media Aspect	43	46	44,5	50	89%	Feasible, no revision needed
3.	Language Aspect	22	22	22	25	88%	Feasible, no revision needed
Average Number Validation						88,3%	Feasible and no revision needed

The data shows that the overall validation score is 88.3%. Based on Table 2, a score of 88—100% is included in the “Very Good” qualification, so it is feasible, and no revision is needed. However, there were inputs and suggestions by the validators as qualitative data. So, KOPICA was revised. The following are the results of revisions based on qualitative data: (a) naming each theme in the media; (2) adding a name to the divider box so that the cards are easily returned to their place; (c) changes in the selection of terms in the instruction or user manual; and (d) addition of handles.

Implementation and Evaluation Stage

In this stage, the activities carried out in the subsequent development research are implementation and evaluation. In this report, implementation and evaluation are presented through the responses of product users (students and teachers) and the effectiveness of the media. KOPICA learning media was tested on a group of first-graders. Students and teachers filled out a response sheet to measure its practicality. The following table shows the results of teacher and student responses.

Table 4
Teacher and Student Responses

No.	Validator	Score		Percentage	Description
		Mean	Max		
1.	Teacher	47	50	94%	Very practical
2.	14 Student	9	10	90%	Very practical
Average Number Validation				92%	Very practical

Based on Table 4, the average response score of 92% from both teachers and students strongly indicates that the developed learning media is not only highly beneficial but also practically applicable within classroom settings. This high score reflects users’ satisfaction with the media’s usability, attractiveness, and relevance to learning objectives. The media’s effectiveness was further tested through classroom implementation using the cluster sampling method, ensuring representative participant groups. The evaluation process involved pre-test

and post-test assessments designed to measure improvements in students' reading abilities. The pre-test served to capture baseline performance across key reading indicators—pronunciation of consonants and vowels, fluency in reading, clarity of voice when articulating words and sentences, and intonation control. After the learning sessions utilizing the media, a post-test was administered to assess progress. The findings revealed a significant increase in performance, with an average pre-test score of 77.2 and a post-test score of 87.5, demonstrating measurable improvement in students' reading proficiency. This positive gain underscores that the developed media not only engages students effectively but also enhances their foundational reading skills. Therefore, it can be concluded that the media is effective, practical, and pedagogically valuable for improving literacy in the targeted educational context.

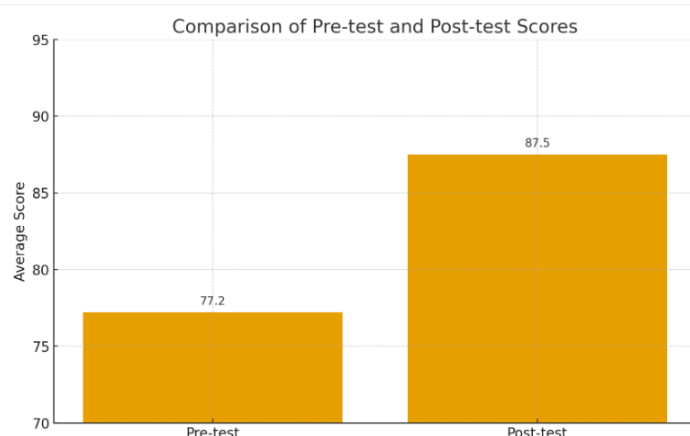


Figure 1 Comparison of Pre-test and Post-test Scores

This shows that KOPICA learning media enhance the initial reading skills of the first-grade students. Furthermore, the data was analyzed using t-test analysis with SPSS 19. The following are the results of the calculation using SPSS 19.

Table 5
The Results of the Calculation Using SPSS 19

The Results of the Calculation Using SPSS 19						T	Df	Sig. (2-tailed)
	Paired Differences							
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Initial Reading Pretest– Initial Reading Posttest	-10.21429	3.92582	1.04922	-12.48099	-7.94758	-9.735	13	.000

Based on the table, the value obtained is sig = 0.000, which means it is smaller than α 0.05 (Sig. $\leq \alpha$ 0.05). Thus, H_0 is rejected and H_a is accepted. This means there are differences in students' reading skills before and after using KOPICA learning media. So, KOPICA can enhance the initial reading skills of the first-grader.

Discussion

Reading, as emphasized by Alneyadi et al. (2023), transcends mere visual recognition of printed symbols—it embodies a deeply reflective cognitive activity that mobilizes advanced mental operations such as analysis, reasoning, evaluation, and problem-solving. In essence, reading is not simply about decoding letters or words but about constructing meaning, interpreting ideas, and connecting prior knowledge to new information. Because of its integral role in shaping human cognition and intellectual growth, researchers across educational disciplines have increasingly focused on developing tools, methods, and media to enhance reading proficiency. This emphasis on improving literacy skills through pedagogical innovation reflects the recognition that reading is foundational to all other forms of learning and communication. Hence, the development of learning media—especially those tailored to early readers—has become an essential strategy in addressing literacy challenges while promoting cognitive, affective, and social growth in learners.

The current study is grounded in a strong theoretical and empirical foundation, drawing from previous research on learning media and reading instruction. Studies conducted by Polinda et al. (2023) and Rohman et al. (2019) have demonstrated that effective learning media can enhance engagement, motivation, and understanding across different learning contexts. Similarly, research by Muda (2024), Mustika et al. (2023), and Nikmah et al. (2025) has shown that media-supported learning environments significantly improve reading skills by providing interactive and contextualized learning experiences. These studies collectively highlight the adaptability of instructional media across subject areas and learning objectives. For instance, Zahra et al. (2024) revealed that *Smart Box* learning media could effectively support comprehension not only in reading but also in other subjects such as *Pancasila*, showing the cross-disciplinary potential of well-designed educational tools.

Building upon these prior works, the present study advances an innovative approach through the development of KOPICA (Kotak Pintar Cerdas Anak) learning media—an instructional product designed not only to improve initial reading abilities but also to cultivate religious tolerance among young learners. This dual objective distinguishes it from earlier research, which primarily focused on cognitive aspects of reading development. The inclusion of tolerance as an embedded value in literacy learning reflects an integrative educational vision—one that nurtures both intellectual competence and moral awareness. By combining literacy with values education, this study addresses the urgent need for character-based learning interventions that prepare students to navigate diverse social contexts with empathy and respect.

The study adopts the Research and Development (R&D) approach, a methodological framework widely used in educational innovation to design, test, and refine instructional products. As noted by García-Valderrama & Mulero-Mendigorry (2005), R&D serves as a systematic process for generating new educational tools that are empirically validated and tailored to real classroom needs. Within this framework, the research produced a KOPICA media prototype that integrates literacy practice with value education on religious tolerance. The R&D cycle involved several essential stages, including expert validation, pilot testing, revision, and classroom implementation. This iterative process ensured that the final product not only met pedagogical standards but also aligned with the developmental and sociocultural characteristics of first-grade elementary school students.

The development of learning media must always be guided by clear and purposeful educational objectives. According to Lince & Burga (2024), instructional media should facilitate students' understanding of concepts, principles, and skills while nurturing positive attitudes and behaviors. Similarly, Rosita & Rohmatika (2019) emphasize that diverse learning experiences, made possible through multimedia and interactive approaches, can stimulate students' curiosity and engagement. For Ediyanto et al. (2024), learning media

function as essential instruments in the teaching process, bridging abstract concepts with tangible learning experiences to help achieve instructional goals. Furthermore, Li et al. (2024) and Mardhotillah et al. (2023) argue that learning media also serve to cultivate specific attitudes and competencies—whether social, moral, or cognitive—thus contributing to holistic education. Yonanda et al. (2024) further highlight the mnemonic advantage of experiential media, noting that students tend to remember learning experiences that involve emotional and visual engagement.

Grounded in these theoretical principles, KOPICA media was designed to cater specifically to the needs of lower-grade elementary students, who often require concrete and visual stimuli to sustain attention and comprehension. Three key student needs guided the development process: (1) the inclusion of relatable pictures and illustrations drawn from everyday life, making it easier for children to associate written symbols with familiar contexts; (2) the provision of multiple, varied learning experiences that foster both cognitive and affective engagement; and (3) opportunities to practice foundational reading skills while simultaneously internalizing values of religious tolerance. This final aspect is particularly significant in the current multicultural educational landscape, where fostering mutual respect and empathy among students from diverse backgrounds is essential. The integration of tolerance education into literacy activities ensures that the act of reading becomes not just a cognitive exercise but also a moral and social learning experience.

To assess the quality of KOPICA media, the study evaluated three key dimensions: validity, practicality, and effectiveness. Validity was established through systematic expert review, encompassing material content, media design, and linguistic accuracy. Each expert panel provided quantitative evaluations—88% for material, 89% for media design, and 88% for language—resulting in an overall validity score of 88.3%, indicating a highly valid product. As Schumann et al. (1995) argue, validation is essential in ensuring that an educational product meets both pedagogical and technical standards, while Saputri et al. (2023) reaffirm that a valid product is one that accurately represents the intended learning goals and content. In this case, the experts' evaluations confirmed that KOPICA was suitable for early literacy instruction, both in terms of age-appropriate content and the integration of value-based learning.

The practicality of the media was determined through user responses from teachers and students. The average practicality score reached 92%, suggesting a strong positive reception and indicating that the media is feasible for large-scale classroom implementation. Teachers found the materials easy to integrate into daily lessons, while students expressed enjoyment and engagement during learning activities. This aligns with findings from Dony et al. (2022), who argue that well-validated and effective learning media can enhance students' attention, participation, and enjoyment in learning activities. In addition, the interactive elements of KOPICA—such as colorful visuals, tangible learning aids, and value-oriented stories—helped make reading practice more meaningful and memorable for students.

Effectiveness was established through quantitative testing using a paired sample t-test. The results revealed a significant improvement in students' reading performance after using the KOPICA media, with a significance value of $sig = 0.000 (\leq 0.05)$. This statistical evidence confirms that the learning media had a measurable positive effect on reading skills. The pre-test and post-test results demonstrated that students not only improved in technical aspects such as pronunciation, fluency, and intonation but also showed enhanced comprehension and confidence during reading activities. These findings affirm that the integration of cognitive and affective components within learning media can produce holistic literacy outcomes.

Furthermore, this research supports the theoretical claims of Azzahrah & Rustini (2023) and Rosita et al. (2023), who highlight that learning media can also deepen students'

understanding of broader moral and social values, including religious tolerance. In this study, both students and teachers responded positively to the inclusion of tolerance-related content, recognizing its relevance and importance in shaping attitudes and behaviors. The qualitative feedback gathered during classroom observations showed that students became more respectful and cooperative toward peers of different backgrounds after using the KOPICA media. Teachers, on the other hand, noted that the integrated approach allowed them to discuss moral lessons naturally within literacy activities, without the need for separate moral education sessions.

Overall, the findings validate KOPICA as a comprehensive educational innovation that addresses multiple learning dimensions—cognitive, affective, and social. Its validity confirms the soundness of design and content; its practicality reflects user satisfaction and ease of application; and its effectiveness demonstrates tangible learning gains. These results collectively indicate that KOPICA meets the criteria of a high-quality educational product, capable of both enhancing literacy and fostering character development. The incorporation of tolerance as an educational value adds an important dimension to literacy learning, positioning KOPICA not only as a tool for improving reading ability but also as a medium for cultivating empathy and social harmony from an early age.

In summary, this study contributes to the growing body of research advocating for value-integrated learning media. By merging literacy and moral education, KOPICA exemplifies how R&D-based educational innovations can respond to contemporary challenges in early education—bridging the gap between skill development and character formation. The evidence from expert validation, teacher-student feedback, and learning outcomes consistently underscores the product's success in achieving its intended goals. In doing so, the study affirms that meaningful reading instruction should go beyond technical decoding to embrace holistic human development, preparing students to become literate, tolerant, and socially responsible citizens in a diverse world.

CONCLUSION

The novelty of this research lies in integrating religious tolerance content into learning media designed to enhance students' initial reading skills. This development proves that media can improve learning quality by making it more engaging, interactive, and fun. It contributes to the implementation of 21st-century learning that emphasizes student-centered approaches while simultaneously introducing values of religious tolerance that will benefit students' social lives in the future. The practical implication is that educators and administrators can adopt KOPICA as an innovative medium to strengthen literacy instruction while embedding character education, and schools can use this model to design broader programs that combine academic and value-based learning. Despite the positive results, this study acknowledges its limitations, particularly the small sample size from only one school, which restricts the generalizability of the findings. Therefore, further studies with larger and more diverse participant groups are necessary to strengthen the evidence base. Future research is also recommended to explore the scalability of KOPICA across different educational contexts and to integrate digital technology into the media, allowing for more dynamic interaction and wider accessibility. Based on the results of this study, it can be concluded that learning media with religious tolerance content is very effective in being applied and enhancing students' initial reading and introducing students to the value of religious tolerance. This research shows that using media in learning can help students more easily achieve learning objectives, enrich the learning experience, and generate student enthusiasm and engagement. Thus, using media appropriate to learning objectives and student development is recommended, especially for primary school students transitioning between early and basic education. In order to optimize the use of media in education, this study also recommends training for educators.

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