# Indonesian Learning Media: Setting, Making, Searching, Selecting, Quality checklists and procedures, and Data Analysis and Synthesis

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Submitted: 2022-04-03. Revised: 2022-09-08. Accepted: 2023-01-28

**Abstract.** Online learning during the pandemic has an impact on the development of the use of learning media. This study aims to describe the Indonesian language learning media in elementary schools. This research is classified as a systematic literature review with the following procedure: (1) setting the background and objectives, (2) making research questions, (3) searching for literature, (4) selecting criteria, (5) quality check-lists and procedures, and (6) data analysis and synthesis. The database used to search for literature is Google Scholar. Searching the data using the keywords "Indonesian language learning media in elementary schools". After that, screening was carried out to get scientific articles for 2017-2022 that discussed Indonesian language learning media in elementary schools. The search results totaled 54 articles were analyzed and synthesized. The analytical technique used is the narrative method by grouping the extracted data. The results showed that the most research articles were reviewed in terms of the year of publication, the design, the research subject, the object of research, the type of media in a row is 2020 by 39%, research development is 39%, the subject of 5th grade elementary school students is 22%, the object of learning Indonesian language in general amounted to 43%, the types of media used were story books and audio-visuals as much as 22% and 13%, respectively. The results of this study are very useful for teachers to make or choose the right learning media in learning Indonesian.

**Key words:** entrepreneurial attitudes, entrepreneurial skills, entrepreneurial knowledge, behavioral intentions.

How to Cite: Ghufron, S., Markub, M., & Gauran-Tudy, I. (2023). Indonesian Learning Media: Setting, Making, Searching, Select-ing, Quality checklists and procedures, and Data Analysis and Synthesis. *Journal of Nonformal Education*, 9(1), 31-38.

**DOI:** http://dx.doi.org/10.15294/jne.v9i1.41840

#### INTRODUCTION

The Indonesian language is a compulsory subject and is very important in the 2013 Curriculum because Indonesian serves as a source of knowledge. Indonesian learning, therefore, must be considered and implemented properly (Fakhruddin, 2021). Indonesian learning is also the basis for the learning in elementary schools. This means that the success of Indonesian learning greatly determines the success of learning in elementary schools. Thus, there needs to be an optimal effort so that Indonesian learning in elementary schools produces maximum learning outcomes.

Indonesian learning needs to be pursued by changing the paradigm of Indonesian learning that is oriented towards cognitive, psychomotor, affective and religious behavior and innovating Indonesian learning. In this learning innovation, it is necessary to develop information technology and social media (Syamsudin & Misro, 2020). The use of information technology makes learning more attractive to students, more fun, and makes communication easier (Sari, 2015; Husaini, 2014). Technology makes it easier for teachers and students in distance learning, makes it easier for students to get learning resources, and makes it easier

for teachers to convey material to students (Salsabila et al., 2020).

Learning in the classroom has changed along with the development and advancement of technology. Technological advances require teachers to renew learning in the classroom. The renewal of learning is through learning media. Teachers should always try to develop learning media so that the learning process becomes more interesting, varied, and not boring (Muhson, 2010). The use of learning media is expected to improve learning outcomes because the learning process is more interesting, learning materials are easier for students to understand, and students are more active in learning (Zainy et al., 2020; Fakhruddin & Shofwan, 2019).

Currently, learning media is more directed at internet-based media and digital technology (Susetyo, 2019). In addition, education must provide students with 21st century skills: critical thinking and problem solving, creative and innovative, and communication and collaboration (Kivunja, 2014;Ryan & Deci, 2000). Therefore, learning must be technology-based and collaboration (Crook, 1995; Johnson & Johnson, 1996; Lawlor et al., 2018). Learning media innovation is important with the aim of improving the quality of education (Syamsudin & Misro, 2020).

Based on the explanation above, the researcher is very interested in conducting a research entitled "Literature Studies: Indonesian learning Media in Elementary Schools. The purpose of this research is to help elementary school teachers to realize innovative Indonesian learning by describing Indonesian learning media used in elementary schools in the period 2017-2022. The specific objectives are to describe (1) the number of Indonesian learning media research articles based on the year of publication, (2) the research design used in research articles, (3) research subjects in research articles, (4) research objects in research articles, and (5) the type of media used in the research article.Based on the explanation above, the researcher is very interested in conducting a research entitled "Literature Studies: Indonesian learning Media in Elementary Schools. The purpose of this research is to help elementary school teachers to realize innovative Indonesian learning by describing Indonesian learning media used in elementary schools in the period 2017-2022. The specific objectives are to describe (1) the number of Indonesian learning media research articles based on the year of publication, (2) the research design used in research articles, (3) research subjects in research articles, (4) research objects in research articles, and (5) the type of media used in the research article.

## . METHOD

This research is classified as a literature study (systematic review). The systematic review rule was used based on the framework of Kitchenham et al. (2009). The advantage of this rule is that it allows researchers to see in depth the relationship between research problems and allows one study to be collected from various sources (Kitchenham 2012). According to Pandey and Pandey (2015), research designed with a systematic review is very important in realizing humans towards a more advanced life because it summarizes various sources of existing research results.

This research design was systematically conducted by following the correct stages or research protocols. Systematic review is a design that uses review, analysis, structured evaluation, classification, and categorization of the results of previous studies. This systematic review consists of several stages, namely: (1) setting the background and objectives, (2) making research questions, (3) searching for literature, (4) selecting criteria, (5) quality checklists and procedures, and (6) data analysis and synthesis (Angelina, 2021).

The research data source is Google Scholar. Research data can be in the form of research articles. The search for research data relevant to the topic of this research was conducted using the keywords: learning media, learning innovation, and Indonesian

learning in elementary schools. The search or collection of research data begins in early April 2022. Research data is considered suitable for analysis if it meets the following criteria: (1) research articles published in 2017-2022, (2) the topic of research articles is Indonesian learning media, (3) articles in the form of research articles, not ideas, (4) research subjects are limited to elementary school level, and (5) research articles use Indonesian. The search for research articles yielded 54 articles.

#### RESULTS AND DISCUSSION

The research data shows the general character of research data consisting of (1) year of publication, (2) research design, (3) research subjects, (4) research objects, (5) types of media used in research articles.

#### **Based on Year of Publication**

The variety of years of publication of research articles can be seen in the following table.

**Table 1.** Year of Publication of Research Articles

Publication Year	f	%
2017	7	13
2018	7	13
2019	12	22
2020	21	39
2021	5	9
2022	2	4
Total	54	100

Based on Table 1 above, it can be seen that the year of publication of the articles that serve as data for this research is as follows: in 2017 there were 7 data (13%), in 2018 there were 7 data (13%), in 2019 there were 12 data (22 %), in 2020 there will be 21 data (39%), in 2021 there will be 5 data (9%), and in 2022 there will be 2 data (4%). From the table above, it can also be seen that the most data contained in 2020 was 21 data or 39%. Of the 21 data, 8 studies took Indonesian learning as the object of research, each of Dewanta's research (2020), Dinanti et al's research (2020), Dilliati's research (2020), Halik & Hakim's research (2020), Pratiwi & Hapsari's research (2020), Surachman's research (2020), Susilo's research (2020), and Zainy et al's research (2020). From the 21 data, 10 research types are development research, namely Mumpuni & Supriyanto's research (2020), Apriliani & Radia's research (2020), Hidayah et al's research (2020), Gogahu & Prasetyo's research (2020), Widyowati et al's research (2020), Krisanti et al's research (2020), Kurniawati & Asmah's research (2020), Herliana & Anugraheni's research (2020), Dinanti et al's research (2020), and Sholichah's research (2020). The data based on the year of publication also describes the most data in terms of research objects and research design.

# **Based on Research Design**

The diversity of research designs can be seen in the following table.

 Table 2. Research Design Research Articles

Design Research	f	%
Development research	21	39
Classroom action research	10	18
Experiment (quasi)	10	18
Qualitative research	10	18
Library research	2	4
Systematic literature review	1	2
Total	54	100

From Table 2 above, it can be seen that the research design used in this research data consists of 6 types. The six types of research designs from the most used to the least consecutive are as follows: 21 development research (39%), 10 classroom action research (18%), 10 experimental research (quasi) (18%), 10 qualitative research (18%), 2 literature studies (4%), and 1 systematic literature review (2%). From the table above, it can be seen that the most research design is development research with 39%, followed by classroom action research, experimental research, and qualitative research each with 18%. This shows that Indonesian language teachers are always trying to improve learning by conducting research on the development of learning media. There are various development models used in development research. There are 8 research articles data that use the Borg & Gall development model, namely Apriliani & Radia's research (2020), Asmarani's research (2019), Mumpuni & Supriyanto's research (2020), Hidayah et al's research (2020), Hijjah & Bahri's research (2022), Dinanti et al's research (2020), Maulidta's research (2018), and Zulfa's research (2018). There are 6 research articles data that use the ADDIE development model (Analysis, Design, Development, Implementation, and Evaluation) namely Ningrum's research (2021), Emka's research(2017), Afifah et al's research (2022), Krisanti et al's research(2020), Kurniawati & Asmah's research (2020). These two Widyowati et al's research(2020). development models, the Borg & Gall model and the ADDIE model, are the most widely used by researchers, while other development models such as the Thiagarajan model, Dick & Carey model, Assure model, and the EDR (Educational Design Research) model are only used by one or two researchers. Researchers who use models that are rarely used by other researchers are Rahmatilah et al. (2017) and Pradipta (2017) using the EDR, Gogahu & Prasetyo (2020)using the 4D model, Herliana

Anugraheni(2020) using the Assure model, Yuanta (2017) using the Dick & Carey model, and Dewi & Yuliana (2018) and Sholichah (2020) using the Thiagarajan model.

# **Based on Research Subject**

The diversity of research subjects in research data can be seen in table 3 below.

 Table 3. Research Subjects Research Articles

Class	f	%
1	8	15
2	6	11
3	11	20
4	8	15
5	12	22
6	3	6
Without class	6	11
Total	54	100

Based on table 3 above, the research subjects contained in the research data are very diverse. The research subjects were grade 1, some were grade 2, some were grade 3, some were grade 4, some were grade 5, some were grade 6, and some didn't mention class. From the table above, it can also be seen that the research data mostly used research subjects for grade 5 and grade 3 students. This is understandable because grade 5 is considered a representative representative for elementary education units. Actually the most representative is grade 6. However, grade 6 generally spends most of their time preparing for the final exam so they can't be bothered for research. Class 3 is the highest class in the low class so that it becomes a low class representation.

## **Based on Research Object**

The diversity of research objects in research data in the form of research articles is shown in the following table.

 Table 4. Research Objects Research Articles

Objects	f	%
Learning	23	43
Writing	10	18
Reading	9	17
Speaking	5	9
Listening	3	6
Literature	3	6
Vocabulary	1	2
Total	54	100

Based on the data above, it can be seen that the object of research in the research article includes Indonesian learning, writing, reading, speaking,

listening, literature, and vocabulary. Research with learning research objects has the highest percentage of 43%, followed by research with writing and reading objects, respectively, 18% and 17%.

#### **Based on Media Type**

The diversity of media types that are the object of research on research data in the form of research articles is shown in the following table.

**Table 5.** Types of Media in Research Articles

Table 5. Types of Media in Research Africies			
Types of Media	f	%	
Storybook	12	22	
Audio visual	7	13	
Application	5	9	
Picture	5	9	
Interactive media	5	9	
Google classroom	2	4	
Domino	2	4	
Animation video	2	4	
Visual	2	4	
Educational games	1	2	
Hand puppet	1	2	
Reading train	1	2	
Komjinasi (imaginary comics)	1	2	
Computer base media	1	2	
Graphic media	1	2	
Song media	1	2	
Photo story	1	2	
Study home portal	1	2	
Crossword clue	1	2	
Ladders snakes	1	2	
Cartoon puppet	1	2	
Youtube	1	2	
Total	55	100	

Based on Table 5 above, it can be seen that the types of media used in the research article consist of 22 kinds of media. From the 22 learning media, the most widely used media is storybook media as much as 43%, audio-visual media as much as 13%, and application media, pictures, and interactive media each 9%.

## **Dominant Learning Media**

The explanation above states that there are 22 kinds of learning media used in research articles. The most widely used learning media are storybook media, audio-visual media, application media, pictures, and interactive media. The following is an explanation of the two most widely used media, namely storybook media and audio-visual media.

#### Book Media (Story, Paste, Game)

The media of this book in this study is intended as a medium that uses the word "book". These media have different names. Some use the names "scrapbook" "pop up book", "story book", "e-book story", "storytelling", and "games book". The name "scrapbook" is used by Dewi & Yuliana (2018), Hijjah & Bahri(2022), Sholichah (2020), andWahyuni & Sulistiyono (2019). The name "pop up book" is used by Alviolita (2019), Hidayah et al. (2020), andRahmatilah et al. (2017b). The name "story book" is used by Apriliani & Radia (2020) and Surachman (2020). The name "e-book story" is used by Gogahu & Prasetyo (2020). The name "storytelling" is used by Sudariyah (2018). The name "games book" is used by Rahmat (2017).

Scrapbook media is media in the form of image patches or other decorations that are applied on paper (Dewi & Yuliana, 2018). Scrapbooking is the art of pasting photos on paper and decorating them into creative works. Scrapbooks make students more creative and able to channel their hobby of documentation, as well as a means of recreation and stress relief. Scrapbook media reflects the uniqueness, living thoughts, and activities of the author, its concrete and more realistic nature shows the main issues discussed. This scrapbook media can overcome space and time and overcome the limitations of observation. Materials for making scrapbooks are easy to obtain without the use of special equipment.

There are four researchers who use scrapbook media in their research. Three researchers namelyDewi & Yuliana, (2018), Hijjah & Bahri (2022), and Sholichah (2020) designed their research in development research, while one researcher namelyWahyuni & Sulistiyono (2019) designed it in classroom action research. Three researchers with their development research took the objects of writing descriptions, writing short stories, and writing expositions, while one researcher with their classroom action research took speaking as objects. The results of the three development studies formulate the same conclusion, namely that the media developed is valid and feasible and practical to use.

Pop up book is a craft that is packaged in the form of a book. Pop up books are widely used to package something attractive and appear embossed. Pop-up books are books that have moving parts or have 3-dimensional elements. Display images that look more dimensional, images that can move when the page is opened or parts are shifted to parts that can change shape. This book also provides surprises in every page that can invite amazement when the pages are opened (Luwitasari, 2016). Because it presents visualizations with shapes made by folding and so on, this pop-up book has its own charm (Khoirotun et al., 2014).

In Indonesian learning, this pop up book has been used by Sylvia and Hariani (2015) and developed by Rahmatilah et al. (2017).. Sylvia proves that there is an effect of using pop up books on elementary students' narrative writing skills. Based on the results of

development research, Rahmatillah et al. concluded that pop-up book media were appropriate to be used to assist students in learning to read beginning and tell stories in lower grades. In other subjects, this pop up book is widely used. Rusmiati dan Nugroho (2019) and Wati & Zuhdi (2017) have proven the influence of pop up books on elementary school students' learning outcomes.

Pop up book media are also used and developed in classroom action research and development research. Hanifah (2014) uses this pop-up book as the media and concludes that this media can improve the verballinguistic intelligence of children aged 4-5 years. Simatupang (2016) uses this media in CAR and concludes that pop up book media can be used to increase motivation and learning outcomes of junior high school students. Dewanti at al. (2019), Baiduri at al. (2019), and Ambarsari and Hartono (2017) developed pop up books for elementary and junior high school students, respectively.

Digital storytelling media is essentially the process of combining images, sound, text, and video to tell something (Frazel & Keen, 2010). Digital storytelling is a new picture of storytelling. Storytelling is a story written on a piece of paper, while digital storytelling is a story that is realized in video equipped with sound, images, text, and animation using computer applications. Digital storytelling is a medium in the form of a short video with a duration of 3 to 15 minutes that combines images, sound, and music to convey information. Sudariyah (2018) has applied this digital storytelling media in classroom action research and concluded that the application of this media in learning can improve the speaking skills of 3rd grade elementary school students.

This media is also widely used in other subjects and educational units. Sulistianingsih (2017), Julianingsih and Krisnawati (2020), and Yuliana & Putri (2021) have proven the effect of using digital storytelling media in learning on students' emotional intelligence, high school students' mathematics learning outcomes, and vocational high school students' learning outcomes. Zamruddyn (2020)and Apdelmi dkk (2021) use this media in classroom action research in order to improve students' listening comprehension and student confidence. Prananta at al. (2017), Asri at al. (2018), and Pratama at al. (2019) has developed digital storytelling media respectively for storytelling learning, English language learning, and biology learning in high school.

#### **Audio Visual Media**

The National Film Council in Yuanta (2017) defines audio-visual media as a type of visual-hearing media that displays information in the form of moving images. The advantages of audio-visual media are that it can attract attention, the audience can get

information from experts or specialists, demonstrations that are difficult to record beforehand, the loudness and weakness of the voice can be adjusted, the projection image can be frozen for careful observation, the movement of the image can be adjusted (Sadiman, 2011). This media has audio (sound) and visual (image) characteristics. Audio-visual media can be in the form of television, films, VCD videos, and sound slides.

This audio-visual media is used in Indonesian learning in general by three researchersnamelyuEggiet & Erviana (2019), Susilo (2020b), Yuanta (2017) used in learning to read by two researchers namely Ma'wa et al. (2019) and Saputro et al. (2021), used by Handrayani (2021) in listening learning, and used by Lestari (2017)in learning to write poetry. The research design used by the seven researchers was different. Three researchers from seven researchers namely Susilo (2020b), Ma'wa et al. (2019), and Lestari (2017) designed this research using audio-visual media with experimental research. The three researchers concluded that audio-visual media was very effective in improving Indonesian learning outcomes, reading learning outcomes, and poetry writing learning outcomes. Two researchers namely Handrayani (2021) and Saputro et al. (2021) designed their research using audio-visual media with classroom action research. The two researchers proved that audio-visual media can improve listening and reading learning outcomes. One researcher namely Yuanta (2017) and another researcher (Eggiet & Erviana, 2019) each designed their research with development research and qualitative research. Both of them also stated that audio-visual media were appropriate to be used and applied optimally in Indonesian learning. Thus, it can be concluded that audio-visual media is proven to be able to improve Indonesian learning outcomes and Indonesian language skills for elementary school students, both listening skills, reading skills, and writing skills.

One type of audio-visual media is video. Video is something that is not foreign to the public, ranging from cartoons, Oscar-class films, to documentaries. Animation is a moving image that comes from a collection of various objects that are specially arranged so that they move according to a predetermined path at any given time. The objects in question are pictures of humans, written text, pictures of animals, pictures of plants, buildings, and so on (Alimah, 2020). This animated video media is widely used in learning in elementary school. With classroom action research, Alimah (2020) has applied it in learning in grade 1 SD and concluded that animated videos can improve students' speaking skills. Putri et al. (2016) and Siddiq et al. (2020) carried out development research with this animated video media and concluded that the animated video media developed was suitable for use in

Indonesian learning because it had good qualifications. In contrast to the three studies, Wijayanti & Rahmawati (2019) and Yolandasari (2020) with qualitative research reveal more about the online learning process. They concluded that online learning in Indonesian learning is less effective because the teacher is difficult to condition the class.

Even so, it cannot be denied that animated video media has been proven to have an effect on students' problem-solving abilities (Sudiarta & Sadra, 2016) and affect the interests and learning outcomes of elementary school science students (Sunami & Aslam, 2021). Therefore, many researchers choose this animated video media for motivation and student learning outcomes. Wuryanti & Kartowagiran (2016) and Utami et.al. (2017) utilize animated video media to increase learning motivation as well as the character of elementary school students' hard work and high school students' learning motivation. Other researchers such as Maryanti & Kurniawan (2018) and Fisabilillah dan Sakti (2021) developed animation media for biology learning and to increase high school students' interest Even so, it cannot be denied that in learning. animated video media has been proven to have an effect on students' problem-solving abilities (Sudiarta & Sadra, 2016) and affect the interests and learning outcomes of elementary school science students (Sunami & Aslam, 2021). Therefore, many researchers choose this animated video media for motivation and student learning outcomes. Wuryanti & Kartowagiran (2016) and Utami et.al. (2017) utilize animated video media to increase learning motivation as well as the character of elementary school students' hard work and high school students' learning motivation. Other researchers such as Maryanti & Kurniawan (2018) and Fisabilillah dan Sakti (2021) developed animation media for biology learning and to increase high school students' interest in learning.

# **CONCLUSION**

Based on the exposure to the research results above, several conclusions can be formulated according to the research objectives as follows. The results showed that based on the year of publication, there were articles published in 2017, 2018, 2019, 2020, 2021, and 2022. The most research articles published in 2020 were 39%. Orderly research articles in 2019 were 22%. Research articles published in 2017 and 2018 were 13% each. 9% of research articles published in 2021. 4% of research articles published in 2022. Based on the research design, there are research articles which are the result of development research, classroom action research, experimental research (quasi-experimental), qualitative research, library research, and systematic literature review research. The most research articles are articles from development research as much as

39%. The number of articles on the results of classroom action research, experimental research (quasiexperimental), and qualitative research is 18%. 2% of literature research articles, while 1% of systematic literature review articles. Based on the research subjects, there are research articles that use research subjects for students 1, grade 2, grade 3, grade 4, grade 5, grade 6, and without mentioning class. Research articles that use the subject of 5th grade students have the highest number of as many as 22%. Research articles that use the subject of grade 3 students as much as 20%. Class 3 is a representation of the lower class. Research articles that use the subject of grade 1 and grade 4 students have the same number of 15%. Research articles that use the subject of grade 2 students as much as 11%. Research articles that use the subject of 6th grade students are only 6%. Based on the object of research, there are research articles that take the objects of Indonesian learning in general, writing, reading, speaking, listening, literature, and vocabulary. Research articles that take the object of Indonesian learning in general are the most, namely 43%. Research articles that take the object of writing are 18%. Research articles that take the object of reading as much as 17%. Research articles that take the object of talking as much as 9%. Research articles that take the object of listening and literature are as much as 6%. Research articles that take the object of vocabulary as much as 2%. Based on the type of media used, 22 kinds of learning media were found. Research articles that use storybooks, audio-visual media, applications, pictures, and interactive media are the most widely used, as many as 22%, 13%, 9%, 9%, and 9%, respectively. All the media used in the research are proven to improve student learning outcomes and can improve students' language skills. Therefore, Indonesian language teachers should always try to use the right learning media in Indonesian learning.

# **ACKNOWLEDGEMENTS**

The researcher expresses his gratitude to LPPM Nahdlatul Ulama University Surabaya which has provided research funds and publications. With these funds, this article can be compiled and completed and published.

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