Literacy Learning Models: A Systematic Literature Review

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Abstract. Literacy is a very important 21st century skill that students need to acquire and have in the era of disruption. This study aims to describe the literacy learning model in schools. A literacy learning model can be defined as a pattern or reference for teaching literacy to students or learners. This research method uses the SLR (Systematic Literature Review) method. Data collection was done by documenting and reviewing all articles on student literacy learning models at all levels of education. The articles used in this study were 27 journal articles obtained from Google Scholar starting from the period 2014-2023. Based on the research, it can be concluded that using the right literacy learning model can improve students' literacy skills in Indonesian language lessons. The implications of the research results by conducting research on improving basic literacy using learning models that can be applied at each level of education ranging from kindergarten, elementary school, junior high school, high school, and university.

Keywords: literacy, types of literacy, learning models.

1 Introduction

Literacy refers to the ability of each individual to manage all information, both through reading and writing. Literacy is an individual's ability to expand knowledge, skills and abilities through reading and various written media [1]. In line with that, Angga et al., 2022 suggests that literacy is the ability to use language and images in rich and varied forms to read, write, listen, speak, see, present, and think critically about an idea in a certain way [2].

Suwandi (2019) explains that literate individuals are individuals who can read, can understand the symbols of language sounds and use them for text reading activities [3]. The introduction of literacy skills is only limited to activities to make individuals who cannot read able to read or literate. It is also mentioned that the most basic literacy is reading skills, namely the development of the ability to understand the symbols of written language comprehensively. In line with Harras (2011), literacy can be defined as the ability to read, which is often referred to as literacy [4].

Literacy in its current development is defined as the ability to access, evaluate and integrate information from various textual sources, which is a requirement for individual educational success, as well as increasing economic and social mobility to improve individual educational, social and economic living standards [3]

Literacy skills are very important abilities that must be mastered by learners in the disruption era, because it is the most important skill to face the peak of the digital transformation wave in the 21st century. According to the Word Economic Forum (2016), children need 16 skills to survive in the 21st century, these skills include basic literacy (how learners apply literacy skills to everyday life), competence (how learners respond to complex challenges), and character (how learners respond to changes in their environment). Within the scope of character, strengthening character education (PPK) in Indonesia refers to five main values, namely 1) religion; 2) nationalism; 3) independence; 4) mutual cooperation; 5) integrity.

PISA measurements aim to evaluate education systems by measuring student performance. PISA measures learners' performance in three areas: reading, math, and science. For the past 20 years PISA has published the results of the science literacy skills of students around the world, and Indonesia always ranks at the bottom. This shows that the quality of science learning in Indonesia is far below OECD (Organization for Economic Cooperation and Development) member countries. Based on this, efforts need to be made to improve the literacy skills of students in Indonesia.

A child's literacy development is influenced by several literacy development factors, including: (1) Early literacy development. Newfoundland Labrador Education (2013:11-19) states that language development at an early age is a key factor in literacy; (2) Gender. The results of the PIRLS and PISA surveys show that gender differences are one of the factors that affect literacy skills; (3) Family socio-economic factors contribute to improving students' literacy skills [5]. Hemmerechts, et al. (2016: 14), found a positive relationship between early engagement in literacy activities and reading literacy with parental education. Children from low socio-economic families have difficulty in (3) Collaboration between students and their families [6]. Research by the Ministry of Education and Employment (2014: 25) shows that students who have a good level of literacy skills are students who have parents/families who care and have time to guide children in reading [7]; (4) Reading activities outside school. Students who have high literacy skills have reading habits outside of school (Shiel, G., & Eivers, E., 2016: 351); (5) Reading activities at school [8]. Reading activities at school have a very important role in improving student literacy (Newfoundland Labrador Education, 2013: 22); (6) The use of strategies in reading [9]. Strategies in reading in this case are the strategies that teachers choose in the learning process; and (7) The relationship between school, family and community. Swan, Deanne W., (2010: 107) states that children's literacy development emerges through interaction with their environment both at home through early literacy, at school and in the community [10].

Literacy integration can be applied to every subject, especially Indonesian language subjects. Indonesian language subjects are compulsory content of the content standards of elementary school education units. Through this subject, it can be used to convey literacy to students. By following this subject, it is expected to form learners to have the ability (standard competencies of Indonesian language graduates): (a) listening skills, namely "understanding oral discourse in the form of orders, explanations, instructions, messages, announcements, news, descriptions of various events and objects around and literary works in the form of fairy tales, poems, stories, dramas, rhymes and folklore, (b) speaking skills, namely using oral discourse to express thoughts, and information in introductions, greetings, simple conversations, interviews, telephone conversations, discussions, speeches, descriptions of events and objects around, giving instructions, declamations, stories, reporting observations, understanding the contents of books and various literary works for children in the form of fairy tales, rhymes, drama and poetry, (c) reading (reading skills), namely using various types of reading to understand

discourse in the form of instructions, long texts and various literary works for children in the form of poetry, fairy tales, rhymes, conversations, stories and dramas, and (d) writing (writing skills), namely carrying out various types of writing activities to express thoughts, feelings and information in the form of simple essays, instructions, letters, announcements, dialogues, formulars, speech texts, reports, summaries, paraphrases and various literary works for children in the form of stories, poems and rhymes [11].

This study aims to find out the model of integrating literacy programs in Indonesian language teaching in elementary schools based on articles published in the 2018-2023 timeframe. Some of the benefits that can be obtained from this literature study include: (1) knowing the literacy program integration model that can be used for students' basic literacy understanding and (2) it can be used as a reference source for further research. For educators, it can be used as a reference for choosing the right approach, model and learning media to improve students' basic literacy skills according to their needs.

2 Research Method

The method used in this research is Systematic Literature Review (SLR), a method with a survey-based qualitative descriptive approach [12]. The survey was conducted on secondary data in the form of primary research results regarding the literacy program integration model. The stages in this research include data collection, data analysis, and conclusions. The data collected are primary studies that have been made into national journal articles. Data were collected from electronic databases registered and indexed by Google Schoolar. Next, all articles found were extracted. Only relevant articles and articles that met the criteria of literacy learning models according to educational levels were included in the analysis stage. The articles reviewed in this study were limited to articles published in 2014-2023.

3 Result and Discussion

In this study, researchers determined articles published in several scientific journals to search for literature. The results of this study are an analysis and summary of several articles obtained through the Google Schoolar database that have been documented related to the literacy program integration model. The data search process begins with reading the abstract of each literature to adjust the topic in this study. Based on the search, twenty-seven (27) related articles were obtained, which are presented in the following table.

Table 1. Research on Literacy Program Models spanning 2014-2023

No	Researcher and Year	Journal	Research Method	Research Results
1	Alip Kunandar (2014)	Jurnal Profetik Vol. 7 No. 1	Descriptive Qualitative	Referring to the three objectives of media literacy activities put forward in the National Workshop on the Concept and Implementation of Media Literacy Indonesia, namely protectionist, empowerment, and media

studies, the media literacy model needed in preventing social conflict for children must emphasize protectionist goals.

No	Researcher and Year	Journal	Research Method	Research Results
2	Heny Subandiyah (2015)	Jurnal Paramasastra Vol. 2 No.1	Descriptive Qualitative	Cooperative literacy learning models include TAI (Team Assisted Individualization), STAD (Student Teams Achievement Division), Two Stay Two Stay, and STL (Student Team Learning).
3	Ashar Hidayah (2017)	Jurnal Pena Vol. 4 No.1	Research (library research)	The application of TIL (The Information Literacy) Type The Big6 model in the learning process can foster a school literacy culture so that students' knowledge and insights increase and create Indonesia as a country where interest and habits of reading, writing, listening and critical thinking are increasing and Indonesia is free from illiteracy.
4	Hendra Saputra, Supriyono (2017)	Jurnal Ilmiah Pendidikan Guru Sekolah Dasar Vol. 1 No.1	Study action class	multiliteracy learning model can improve narrative writing ability in grade V elementary school.
5	Febrina Dafit (2017)	Jurnal Inovasi Pendidikan dan Pembelajaran Sekolah Dasar Vol. 1 No.1	study quantitative with quasi experimental method	The multiliteracy learning model gives an influence on the reading ability of elementary school students, it is proven that the average score of reading ability of students who learn through multiliteracy learning model is 18.76. While the average score of reading ability of students who learn not using multiliteracy learning model is 16.04.

6	Mimin Ninawati (2019)	Jurnal Pendas Vol. IV No.1	study quantitative with method experiment	Critical literacy learning model through concept approach can improve creative writing skills in elementary school
7	Akhmad Bahtiar Rifai, Nas Haryati Setyaningsih (2019)	Jurnal Dwija Cendekia Vol. 3 No. 1	quasi experimental design experiment with form nonequivalent control group design	(1) the application of digital multiliteracy model in learning to write fantasy story text in grade VII junior high school is effective; (2) the application of creative-productive model in learning to write fantasy story text in grade VII junior high school is effective; (3) digital multiliteracy model is more effective in learning to write fantasy story text for grade VII junior high school students than creative-productive model.
8	P.S. Adiwiguna, N. Dantes, I M. Gunamantha (2019)	Jurnal Pendasi Vol. 3 No. 2	Study experimental pseudo	STEM-oriented Problem Based Learning (PBL) has an effect on critical thinking skills and science literacy.
9	Tika Y.A, Yoyo Z. A, Dudu S.S (2019)	Seminar Nasional Pendidikan, FKIP UNMA	Method study experiment	The multiliteracy learning model has a great effect on the narrative writing skills of elementary school students, especially in text-based Indonesian language learning in the 2013 curriculum, as evidenced by the posttest results in the experimental class were 90.4, while the posttest results in the control class were 73.8.
10	Diardana Prima Sintasari, Andayani, dan Sarwiji Suwandi (2019)	Proseding Seminar Nasional (2019)	Studies Case	The implementation of learning that integrates information literacy in Indonesian language learning such as learning methods used by teachers to create a learning atmosphere and learning process so that students achieve basic competencies in the learning atmosphere and learning process so that students achieve

No	Researcher and Year	Journal	Research Method	Research Results
				basic competencies or a set of predetermined indicators. Learning media also plays a role in realizing a learning achievement.
11	Ummu Aiman & Rizqy Amelia R.A (2020)	Jurnal Pendidikan Dasar Flobamorata Vol. 1	Study experiment quasi (*quasi experiment*)	Significant differences in results between the science literacy of groups of students taught using the PBL model and groups of students with the expository method. The results can be seen in the average score of science literacy of students using PBL of 23.51 for the average using the expository method of 15, 75. Therefore, the results of science literacy in PBL learning are better when compared to the expository method.
No	Researcher and Year	Journal	Research Method	Research Results
12	Yang Gusti Feriyanti (2020)	Jurnal Komunikasi Vol. 2 No.3	Study Qualitative	Improving the literacy skills of students of SDN 20 Matras through the storytelling method (dongeng)
13	I Gusti Agung Made Gede Mudana (2020)	Vidya Samhita Vol. IV No. 2	Description Qualitative	The application of scientific methods in learning involves process skills such as observing, classifying, measuring, predicting, explaining, and concluding in order to achieve the goal that students have the ability to think at a high level (critical thinking skills) critically, logically, and systematically.
14	Cholifah Tur Rosidah (2020)	Inventa: Jurnal Pendidikan Guru Sekolah Dasar Vol. 4 No.2	Approach quantitative	The application of cross-literacy techniques in the PBL model gets a positive response from students as learning subjects. The technique can make students more motivated and challenged to solve the problems given. In

				addition, it can also have a positive impact on social life, including feeling that their opinions are more valued and can build better relationships with friends.
15	Dyah Ambarwati, Meyta Dwi K (2021)	Jurnal Cendekia Vol.5 No. 3	Study Quantitative	The results of the experimental class research are better than the control class, because it uses Problem Based Learning assisted by YouTube media which forms students actively in learning activities by discussing and digging up information through YouTube media. Then obtained an Effect Size of 0.710 with the interpretation of the medium category. So it is concluded that this study shows the effect of Problem Based Learning assisted by YouTube media in improving the numeracy literacy of class VIII students.
16	Intan Muzahiyatul Latifah, Tsalitsatul Maulidah, Maulidia Tifani Alfin Nur Hardia (2022)	Jurnal Citra Pendidikan Vol. 2 No. 3	study quantitative This use method experiment pseudo	The multiliteracy learning model based on local wisdom affects the results of writing poetry. This is evident from the results of the analysis using the t-test on the experimental class pretest and posttest scores. From the calculation in the experimental class, it is known that the tcount (th) is smaller than the ttable value (ttb) at the 5% significance level df 24 (tth: -0.420 < ttb: 0.678).
17	Raden Roro Endang Kusprinah, Heru Subrata (2022)	Jurnal Pendidikan Vol. 11 No. 2	Studies literature	Edutainment learning method, problem based learning, Student Facilitator and Explaining, learning using Wattpad application

No	Researcher and Year	Journal	Research Method	Research Results
				model, fairy tales, Jolly Phonics, flashcard path to literacy, Cooperative script can improve literacy reading and writing.
18	Elva Yudianda, Isah Cahyani, Yunus Abidin (2022)	Jurnal Pendidikan Bahasa dan Satra Indonesia Vol. 4 No. 1	Study This use method research and development	The digital literacy-based flipped classroom model in learning to write anecdote texts is a learning model that utilizes technology in its application.
19	Astri Sutrinawati, Oktoa Rosfiani, Cecep Maman Hermawan, dkk (2022)	Jurnal Cakrawala Pendas Vol. 8 No.4	study action class with using Kurt Lewin's model	The project-based constructivist learning model can improve students' literacy skills. This is evident because there is an increase in the average literacy skills of students from cycle I to cycle II.
20	Resvan (2022)	Jurnal Jote Vol. 4 No. 1	Study experiment	The problem-based learning model can significantly positively influence the poetry writing skills of elementary school students compared to the direct learning model.
No	Researcher and Year	Journal	Research Method	Research Results
21	Alfina Nor Kumala Sari, Dyah Anggi Ika Pramesti, Hesti Hendriani, dkk (2022)	Seminar Nasioanal Bahasa, Sastra, Seni, dan Pendidikan Dasar 2 (2022)	Study qualitative	As a learning model, blended learning has a role and impact on digital literacy of elementary school students. Blended learning can be one of the alternatives to support the digital literacy skills of elementary school students, and also to facilitate teachers in providing materials.
22	Prof. Dr. Sarwiji Suwandi, M.Pd. (2022)	Proseding Unimor	Description Qualitative	Indonesian language learning with reference to Curriculum 2013 is at least based on six pillars, namely the communicative approach, scientific approach, text-

				based, CLIL-based (content language integrated learning), character education-based, and literacy-based is an effort to realize learners who have multiliteracy competence is expected to be a collective awareness.
23	Tita Ragil Tri Wahyuning Cahya, Pinkan Amita Tri Prasasti, Naniek Kusumawati (2022)	Jurnal Ilmiah Ilmu Pendidikan Vol. 5 No.9	Study Development	STEM-based teaching materials with the MER model produce teaching materials with characteristics that make the concept intact and rich in material that supports the improvement of students' science and technology literacy.
24	Hasna Lathifah N, Astri Rizke Y, Anggara D (2023)	Educurio Vol. 2 No. 1	study quantitative with pre - experimental design design using design one group pretest - posttest design research	The multiliteracy learning model is proven to be significant in improving the thinking skills of elementary school students
25	Nahrun Najib Siregar, Firmansyah, Purwati, Haryanto (2023)	Jurnal Elementaria Edukasia Vol. 6 No. 2	Study quantitative	The problem-based learning model assisted by student worksheets is effective to improve numeracy literacy skills with the criteria that the proportion of classical learning completeness can be said to be more than 75% of students get a score of 65, the numeracy literacy skills of students in classes that use problem-based learning models assisted by student worksheets are better than the numeracy literacy skills of students with conventional learning and there is an influence of curiosity character (X) on posttest numeracy literacy skills (Y).

No				
26	Mellasari Arina Fajarini , Endang Sri Maruti, Arina Manaksia (2023)	Paramasastra Vol. 10 No.2	Classroom action research	Learning *Problem Based Learning* (PBL) makes Indonesian language learning becomes fun and valuable for student .
27	Mimi Rosadi , Alkausar Saragih (2023)	Linguistics : Journal of Language & Literature Vol. 8 No.2	Study description qualitative	The results achieved student during the learning process using contextual models assisted by audiovisual media based literacy get good result _ very . Student understand and understand to teaching materials delivered by the teacher to student . Learning specifically Indonesian is increasing with very good results

The data in table 1 is then grouped based on the type of literacy and the use of literacy learning models applied in Indonesian literacy learning. The grouping results are presented in table 2 and table 3.

Table 2. Types Indonesian Literacy

No	Model	Amount
1	Media Literacy	2
2	Cooperative	3
3	Multiliteracy	6
4	Literacy Critical	1
5	*Problem Based Learning*	6

From the research data in Table 2, it is known that there are 5 (five) types of literacy used in Indonesian language learning, the most frequently used are multiliteracy and Problem Based Learning. Multiliteracy implies the skill of using a variety of ways to express and understand ideas and information by using conventional text forms as well as innovative texts, symbols, and multimedia [13]. Multiliteracy learning has been proven to significantly improve the critical thinking skills of school students, and supported by Problem Based Learning (PBL) makes learning Indonesian language fun for students.

Table 3. Learning Model Indonesian Literacy

No	Model	Amount
1	Approach Model Scientific	2
2	Approach Model *edutainment*	1
3	Learning model Class Backwards	1
4	Approach Model Constructivism	1
5	Learning model Based Problem	1
6	Learning model *Blended learning*	1
7	Learning model Contextual	1

From the research data in Table 3, it is known that various learning models can be used in basic literacy activities in school students. The scientific learning model is more widely used in Indonesian language learning. The application of scientific methods in learning involves process skills such as observing, classifying, measuring, predicting, explaining and concluding in order to achieve the goal that students have the ability to think at a high level (critical thinking skills) critically, logically and systematically. The types of literacy and literacy learning models from Tables 2 and 3 overall involve more student activities from elementary, junior high, high school and university age levels in solving a problem or problem in learning that can be used as a solution to improve students' basic literacy skills, as expressed in the contents of the following table.

Table 4. Learning model used in ability literacy base based on level His education

No	Educational level	Amount
1	Elementary school	16
2	Junior High School	2
3	Senior High School	3
4	College _	1

From the research data in Table 4, the basic literacy learning model is more often used or applied at the primary school level, because the main purpose of literacy learning is to create a literate generation starting from the primary school level. Improving literacy becomes the starting point for cultivating literacy. Literacy is closely related to education and nurturing, both at home and at school, to increase literacy in each individual. The literacy learning model can be interpreted as a reference for teaching literacy to students or learners. Based on the description of the data presented in the table above, the learning models to improve literacy amounted to 5 learning models with 7 approaches.

The literacy-based learning model is integrated with learning activities that make it possible to instill the habit of reading from an early age, so that students are accustomed to finding answers by reading a text to get the essence of the text which is commonly referred to as a reading culture. In addition, the literacy-based learning model is also related to the 2013 curriculum, which directs more text-based learning. The application of this model also has a positive impact on students to develop literacy skills, especially in reading skills. This is in line with the results of Herman's research (2020) which shows that literacy-based learning models can develop students' interest in reading, train students in writing activities, and can hone students' speaking skills.

Literacy skills cannot be generalized because learners' understanding is different, even at the same age. According to previous research by Suryati (2021), research through project-based learning has a significant effect on students' literacy skills. Patimah's research (2021) explains that habits formed from narrative learning models can have a positive effect on reading, written and oral expression [15]. Therefore, with the right learning model, it can improve students' reading and writing skills. With this ability to read and write, basic literacy (numeracy, science, digital, financial, and culture and citizenship) can also be developed.

4 Conclusion

Based on the results of a systematic review of a number of published studies, it can be concluded that learning models to improve basic literacy can be done by using media literacy, multiliteracy and critical literacy learning models with scientific, edutaiment, flipped classroom, constructivism, problem-based and contextual approaches. The learning model can be applied by teachers according to the problems and needs of students supported by the infrastructure at school.

References

[1] C. Barrat-Pugh and M. Rohl, Literacy Learning in the Early Years. New York, 2020.

[2] A. Angga, Y. Abidin, and S. Iskandar, "Penerapan Pendidikan Karakter dengan Model Pembelajaran Berbasis Keterampilan Abad 21," Jurnal Basicedu, vol. 6, no. 1, pp. 1046–1054, Jan. 2022, doi: 10.31004/basicedu.v6i1.2084.

[3] S. Suwandi. Literacy Education. Bandung: PT Teen Rosdakarya. 2019.

[4] Harras, Kholid A. "Mengembangkan Potensi Anak melalui Program Literasi Keluarga", Jurnal Artikulati Vol. 10 No. 1.2011.

[5] Newfoundland Labrador Education. Learning for A Lifetime : A Literacy Plan for Kindergarten to Secondary. Departement of Education P.O Box 8700 St. John's NL A1C 4J6 Telp. 1- 709-729-5097 education@gov.nl.ca. www.govnl.ca/edu. 2013.

[6] Hemmerechts, K., Agirdag, O., & Kavadias, D.The Relationship Between Parental Literacy Involvement, Socioeconomic Status and Reading Literacy. Educational Review DOI: 10.1080/00131911.2016.1164667 ISSN: 0013-1911.2016.

[7] Ministry of Education an Employment. A National Literacy Strategy for All in Malta and Gozo 2014 – 2019. Tersedia: http://education.gov.mt/en/Documents/L iteracy/ENGLISH.pdf http://education.gov.mt/en/Documents/L iteracy/ENGLISH.pdf. 2014.

[8] Shiel, G., & Eivers , E. International Comparisons of Reading Literacy: What Can They Tell Us? Cambridge Journal of Education, 39:3, 345-360, DOI: 10.1080/03057640903103736. 2016.

[9] Swan, D. W. Emerging Paths To Literacy: Modeling Individual and Environmental Contributions To Growth In Children's Emergent Literacy Skills. UMI Number: 3399089. ProQuest LLC 789 East Eisenhower Parkway PO Box 1346 Ann Arbor, MI 48106-1346. 2010.12.

[11] M. A. Fajarini, E. S. Maruti, and A. Manasikana, "PENINGKATAN LITERASI SISWA KELAS V SDN 1 KADIPATEN PONOROGO MELALUI METODE PROBLEM BASED LEARNING (PBL) PADA PEMBELAJARAN BAHASA INDONESIA," *Paramasastra: Jurnal Ilmiah Bahasa Sastra dan Pembelajarannya*, vol. 10, no. 2, pp. 224–240, 2023, [Online]. Available: http://journal.unesa.ac.id/index.php/paramasastra

[12] Elwijaya, F., Harun, M., & Helsa, Y. (2021). Implementassi Pendekatan Realistic Mathematics Education (RME) di Sekolah Dasar. Jurnal Basicedu, 5(2), 741–748. https://doi.org/10.31004/basicedu.v5i2.796 14.

[13] Abidin, Y. 2015. Pembelajaran Multiliterasi. Bandung: Refika Aditama.

[14] Suyati. Upaya Meningkatkan Literasi Baca-Tulis Siswa melalui Project Based Learning untuk Menerbitkan Buku Ber-ISBN. Master Thesis. Universitas Internasional Batam. 2021.

[15] Patimah. Efektifitas Metode Pembelajaran Dongeng Dalam Meningkatkan Kemampuan Literasi Anak Pada Jenjang Usia Sekolah Dasar. Al Ibtida: Jurnal Pendidikan Guru MI. 2021.