

Development of Literature Model Based on Multiplatform Application

Muhammad Taufik Hidayat^{1*}, Teuku Junaidi¹, Azrul Rizki¹, Sukirno Sukirno¹, Nuriana Nuriana²

¹Universitas Samudra, Indonesia

²PKBM Huda Wan Nur Langsa, Indonesia

*Email: lumimanullang@gmail.com

Submitted: 2021-08-25. Revised: 2021-10-20. Accepted: 2022-01-21

Abstract. This research was conducted based on the condition of the low grades of students in the field of literacy at PKBM Huda Wan Nur. This is due to the lack of application of updated and digital platform-based learning media used by teachers in the teaching process, especially reading and writing literacy and writing local wisdom texts. This research is in the form of a qualitative descriptive which aims to improve student literacy, especially literacy with multiplatform media concepts that combine online and offline learning effectively at PKBM Huda Wan Nur, Langsa City. The subjects of this study were students and teachers of PKBM Huda Wan Nur Langsa City. The research was conducted by applying the Research & Development method or the R&D method. The data were analyzed by describing the questionnaire containing the Likert scale and the percentage of the product feasibility test. The results show that during the implementation of learning using multiplatform media, students' work at school is at a good level compared to before. Then, the results of students' ability to use multi-platform applications are at a good level for LMS, Google Meet, and Google Classroom, while for Youtube, zoom meetings, and Instagram are at a very good level. For this reason, it can be said that the development of reading and writing literacy with multi-platform applications has succeeded in improving students' writing skills, especially local wisdom texts. This research is a new thing that was carried out at PKBM Huda Wan Nur and Langsa City by combining a literacy system with multiplatform digital media that is beneficial for the development of knowledge, especially writing texts for students. In addition, it is also useful for teachers to take the first step in developing students' literacy skills by using digital media.

Key words: literature model, read-write literacy, local wisdom text, multiplatform application

How to Cite: Hidayat, M. T., Junaidi, T., Rizki, A., Sukirno, S., & Nuriana, N. (2022). Development of Literature Model Based on Multiplatform Application. *Journal of Nonformal Education*, 8(1), 89-96.

DOI: <http://dx.doi.org/10.15294/jne.v8i1.31749>

INTRODUCTION

Science is a vast thing and is always growing. In the world of education, the development of science and technology occurs very rapidly. These developments make the community must continue to strive to increase its power and ability so as not to be eroded by the times (V. Indriyani et al., 2019); (De' et al., 2020); (Lyons et al., n.d.). Education that is growing so rapidly shows an ongoing progress in human life. The growth and development of education in a quality society is a characteristic or sign of an advanced society. To realize quality education, it takes a literate society and has a high willingness to be literate (Elihami, 2021); (Ahmad & Wibawa, 2021); (Djibu & Duludu, 2021). One of them with the use of technological advances today can help learning process activities become more effective and efficient. Learning that takes place during pandemic times requires the combination of distance learning with face-to-face learning. The most likely thing to do is the blended learning process which is a combination of the two.

Various movements have been made to increase reading and writing power for students, especially in the Langsa City area. Aceh. Literacy is a simple

meaning is the ability to read and write (Purohit et al., 2015) ; (Kanniainen et al., 2019); (Nurhayati et al., 2021). Literacy in Indonesian language learning can be done in various ways. In order to maximize literacy skills, the initial reading and writing method is one alternative to improve the child's abilities (Saragih et al., 2021); (Andriyani & Ningsih, 2021); (Susanti et al., 2020). In terms of language, understanding literacy becomes a very simple thing. However, in the world of education in Indonesia, literacy becomes the main thing that is highly emphasized in the process of teaching and learning students. Literacy activities involve school residents (students, teachers, principals, parents) and the community (Ramandanu, 2019). Literacy support media is a digital application-based media in the form of multiplatform. The features provided in this application are adapted to the indicator (GLS) in Junior High School. The language skills that are expected to be possessed by students at PKBM Huda Wan Nur is able to read, write, and analyze various targeted texts will be achieved after this research is carried out with the assisted multiplatform application (Morales, 2011); (Dong, 2020); (Trisanti & Suharta, 2018).

Proficiency in literacy is a magnet and the main capital for students to determine their future in the teaching and learning process. According to literacy experts (Poerwanti et al., 2021) suggested that fostering a culture of literacy is a strategic effort to build the nation's civilization. "It is difficult to build a civilization without a culture of reading (literacy)" so that literacy becomes urgent in the field of education. In particular, this research aims to improve the literacy skills of PKBM Huda Wan Nur students in Langsa City who will prepare themselves for higher education. The urgency of research focuses on the ability to literate students who are very low compared to other countries, Indonesia is currently still in the position of 57 out of 65 countries in the world. There are several specifications targeted in this study, namely the application of literacy to the student learning process, increased power and level of information readability in students, and improvement of students' ability to write, especially writing texts that are the main benchmark of language learning at PKBM Huda Wan Nur.

One aspect of language that must be mastered by students is speaking, because speaking skills support other skills (Laksono et al., 2018); (Arbarini et al., 2018); (Rosmilawati, 2017). To increase reading power, the thing that must continue to be fostered is the interest in reading students. Interest in reading is born with the process of habituation and a person's willingness towards a reading. Interest in reading can only grow if students or learners have a strong attention and willingness to read. In addition, students should also be happy with reading materials so that the reading process is done of their own accord.

In recent years, the Ministry of Education and Culture through the Agency for Language Development and Development has formulated the National Literacy Movement (GLN) to improve the literacy power of students. One of the flagship programs is the writing of reading materials. In 2018, 129 reading book titles were published for elementary school level through writing competitions. This shows that the government is not playing games to echo literacy in Indonesia. Strengthening literacy in Indonesia continues to be implemented to improve the ability of Indonesian students and people in reading and writing. It is very concerning to see the results of pisa research that places Indonesia 57th out of 65 countries studied in the field of reading. That is, Indonesia is in the bottom 10 in terms of literacy. Thus, Indonesia's target to improve literacy is very passionate (But, 2020); (Chaiyama, 2015).

Then, the teacher's ability to make learning devices is still low. Teachers only use printed books and LKS as the only source of knowledge. Though the times are sophisticated as felt at this time teachers can

use information technology wisely. The ability of learners to communicate is largely determined by language skills. Indonesian language learning in schools is aimed at improving the process of communication in the language of learners to be in accordance with good and correct language rules. Improved communication skills can be done orally and in writing to develop students' appreciation of literary kasya in Indonesia. For the required understanding of students in Indonesian language learning must be adjusted to the minimum qualifications of learners. Indonesian language lessons for learners should at least master knowledge, language skills, and a positive attitude towards the development of Indonesian language and literature (Olufunke, 2018); (Musdalifah et al., 2021). In language competence there are four main things that are built in the world of literacy, namely listening, speaking, reading, and writing. Likewise vice versa, to understand the basis of language competence requires a high spirit of literacy. Therefore, the law of reciprocity between language competence and literacy plays an important role in understanding the four language competencies (Shofwan et al., 2019).

This planned research focuses on media development to support the School Literacy Movement (GLS) in PKBM Huda Wan Nur Langsa students. The media that can be used to support literacy is very much. There are things that are online or offline. One of the dominant media used for literacy supporters is the use of multiplatform application-based media (Darlan, 2017); (Sujarwo et al., 2021); (Risdianto et al., 2021). The role of multiplatform applications is considered useful to control literacy activities used by students in schools, especially the development of reading-and-writing skills. The low level of literacy and its application in the world of education, especially in Aceh and Indonesia in general is of particular concern to researchers. Literacy interest becomes an important key to the progress of a nation, because mastery of science and technology can only be achieved with a high interest in reading, not listening or listening. Literacy cannot be separated from education and language competence so language research schemes always associate the learning process with literacy skills.

In general, this study was motivated by a lack of learning media controlled by teachers to improve students' literacy skills at PKBM Huda Wan Nur in Langsa City. Teachers routinely still use print media in the form of books to teach reading to students. In the digital era coupled with pandemic situations that do not allow learning to be done offline, teachers must develop the learning process using digital-based media (Hazizah & Ismaniar, 2020). Observations conducted at PKBM Huda Wan Nur in Langsa City in the academic year 2020/2021 found that teachers

have limited to delivering materials, especially for literacy to write about writing local wisdom that must be done online. Teachers also have difficulty accessing methods of literacy development related to local wisdom in Langsa because of the lack of reading. Research conducted for the development of literacy still uses offline methods and direct practice in schools with direct visualization methods. Therefore, this research is present to provide new methods in the development of literacy in writing local wisdom texts with multiplatform media suitable for online and offline learning.

The position of this research is a development carried out from previous studies that still use face-to-face or direct learning methods. In this study, researchers tried to build a simple media that is often used by students and teachers as social media. The media is used as a learning medium that can display audio and visual information about local wisdom in Langsa in a clear and detailed manner. This research was also carried out on the basis of previous research that has been carried out by several other researchers. Researchers took several references from previous research such as research conducted by (Cahyono & Ardhyantama, 2020) entitled Development of Literacy Reading in Ar Rahmah Integrated Islamic Elementary School Pacitan". The research shows the method of developing literacy literacy that is carried out during learning and is combined with extracurricular activities. The current school year, which is still in the pandemic period, cannot be carried out. This is what makes teachers at PKBM Huda Wan Nur difficult in developing literacy, especially for writing local wisdom. References to previous research are only carried out to support a literature review and the methods or media used. It can be concluded that research for literacy development must be developed using the latest methods, one of which is the use of multiplatform media. Based on the following explanation, the researcher believes that this research is important to do in order to answer all teacher concerns in teaching literacy, especially in writing local wisdom texts online and offline. Research conducted by several previous researchers was only able to answer the problems of teaching reading and writing but was still constrained by online learning and media updates (Darwin et al., 2021). Referring to these problems, the development of literacy based on multiplatform applications is one of the best ways to improve the ability to write local wisdom texts at the PKBM Huda Wan Nur in Langsa City in particular and Indonesia in general.

Based on the description that has been outlined, the problem on which this research is based aims to develop multifplatform applications to control student literacy activities that can answer the demands of

student needs at PKBM Huda Wan Nur amid the covid-19 pandemic situation (Hardika et al., 2020);(Sinta, 2019). Based on the novelty of this research lies in the use of multiplatform-based application media in improving students' understanding of local wisdom texts. A multiplatform application is an application that can be run by any digital operating system. In this study, multiplatform-based applications used can be based on android and iOS which are currently most widely used by the community, especially millennials. There are several features contained in the application that are in accordance with the GLS indicator in particular. This process of reading-writing literacy development will be developed to the maximum using digital media for the fulfillment of digital-based literacy. With the development of this literacy-and-write model, it is expected to increase students' knowledge of local wisdom in Aceh. Furthermore, this literacy-and-write literacy model was developed into one of the Indonesian language learning alternatives that teachers can use in active, innovative, effective, and fun learning so that students become enthusiastic and have a positive impact on learning outcomes.

METHODS

This research method emphasizes more on development or *research and development* or R&D. The model or research and *development* or R&D used is the Borg and Gall model combined with the Dick and Carey learning development model (Trianto, 2018). The basic purpose of implementing this literacy-write model is to realize the results / products of student work in students of Huda Wan Nur Teaching and Learning Activities Center (PKBM) or Equality Education students in the Langsa City area in writing local wisdom texts while being able to prove the effectiveness of a reading material produced by students. This research was conducted at PKBM Huda Wan Nur Kota Langsa. The students who were sampled in this study numbered 36 students. The subject of this study is the Principal, Teacher, and Student contained in PKBM Huda Wan Nur Kota Langsa. The research procedures realized in this research adapt the ten steps in the Borg and Gall research and development model. The three main stage steps, namely 1) preliminary research, 2) the development of teaching materials, 3) and the implementation of teaching materials. Furthermore, the three stages lead to the next stages, namely: 1) preliminary study; 2) make the design (design) of the product; 3) develop the initial form of the product; 4) conduct limited trials; 5) revise the limited test results; 6) conduct extensive trials; 7) revise the product from extensive

trials; 8) conduct an effectiveness test; 9) make revisions, and (10) make the final product.

The procedure for developing the literacy model in this study will be validated by experts / data experts from colleagues and experts in the form of comments, criticism, suggestions, corrections, and assessments of textbook products writing texts based on local wisdom. The data to be taken in this study are as follows: (a) aspects of learning, the correctness of content, and the suitability of the material obtained from the material expert and learning design, and (b) the quality of the appearance and presentation of the material, obtained from individual, small group, and field tests. Data collection techniques in this study use observations, interviews, and questionnaires. In this study, researchers acted as the main instrument. In carrying out the task of the researcher assisted by instruments in the form of (a) observation guidance, (b) interview guidance, and (c) questionnaires. The main instruments used to collect data in this development are expert team validation questionnaire sheets and student response questionnaire sheets to teaching books obtained from individual trials, small group trials, and limited field trials.

Data Analysis techniques in this development research by describing opinions, suggestions, and responses from comment sheets. Data is collected through expert validation, questionnaires distributed to students. Research instruments for validators and individual tests, small groups and limited field groups are made in the form of likert scales. The data will be analyzed descriptively quantitatively. Data from the questionnaire is tit-for-like on the likert scale. Assessment of product feasibility based on likert scale is then searched on average to determine the quality and usefulness of the product based on the opinion of the product user.

RESULTS AND DISCUSSION

Based on research conducted at PKBM Huda Wan Nur Kota Langsa in 2021 on the development of literacy, it is known that students' ability to be literate can be improved by multiplatform-based learning. In times of pandemic, face-to-face learning that can only be done with a *shift* system or not running 100% makes learning constrained. The conditions during the pandemic are urgent to be addressed. It is necessary to create an evaluation mechanism that allows the occurrence of things such as: 1) the production process of research instruments is quite easy; 2) the process of selecting test points from the bank is easy to do; 3) examination of test results is easy to do; 4) the process of processing the score and providing feedback is easy; and 5) anxiety arising in the test

taker due to the evaluation process is not too high or still at a reasonable level (Setemen, n.d.).

The platforms used for the development of literacy in PKBM Huda Wan Nur are learning management system (LMS) schools, youtube, whatapps, and google classroom (Anugrah et al., 2021);(Sundari & Leonard, 2021). Learning is also combined with an online face-to-face system using google meet and video zoom apps (Wahyuni & Etfita, 2019); (Agusriadi et al., 2021). At the research stage, the activities carried out to develop literacy in increasing the ability to write local wisdom texts in PKBM Huda Wan Nur students can be presented in the following table:

Table 1. Reading-Writing Literacy Development Instruments

Activities	Purpose	Information
Manufacture of teaching materials	Supporting the teaching and learning process to improve students' writing skills	LMS
Submission of Local Wisdom Text Materials	Delivering materials for students' understanding of writing	Google meet/zoom meeting
Daily text reading program	Deepening of the material so that students understand about the text	Google classroom
Local wisdom video exposure	Teaching students to know local wisdom in Langsa and Aceh	Youtube
Writing outline creation	Train students to define the writing flow	LMS, Google classroom, zoom
Deepening of text writing material	Teach students to write with the appropriate framework	LMS and Self-employment
Virtual visit of local wisdom in Langsa	View the forms and types of local wisdom in Langsa online	Youtube and social media
Development of writing in the form of local wisdom text	Students produce writings about local wisdom	LMS
Post posts on LMS and Social Media	Publication	Social media

Research conducted at PKBM Huda Wan Nur Kota Langsa for the development of multiplatform-based literacy is considered to have succeeded in improving the ability to write local wisdom texts for students. It is characterized by the work of students who are judged to get 80% worthy results to be published into books by students. Students who are the subject of research in the development of reading-and-write literacy are taken from class VIII. The results obtained after the research process are known as follows:

Table 2. Student Work Assessment Results

Assessment Object	Average Student Grades
Essay Skeleton	82
Paragraph coherence	85
The customize of content with local wisdom Langsa	82
Theme development	85
Spelling	87
Use of diction	82
Average	84

Based on the table it can be seen that the results of student work for the development of multiplatform-based read-and-writing literacy can improve the ability to write local wisdom texts in students. Students who become the object of research in the target school get a decent score based on the likert scale for a resulting writing. Students' work is judged on 6 aspects according to the table and is known to have scored the best in its subsections and get good grades based on the description table.

The writing framework created by students has been in accordance with the writing techniques of the essay framework taught at the material delivery session. Students at PKBM Huda Wan Nur Kota Langsa and others developed an essay framework with deductive paragraph development. Students better master the author of the essay framework by placing the main sentence at the beginning of the paragraph. The skeleton is made by starting the general thing in a special direction. The framework of the essay made by students places things that are in the form of local wisdom. The value given by the expert team to the average student has exceeded 80% so that in the writing section of the essay framework, PKBM Huda Wan Nur students in Langsa City are considered to be at a good level .

At the paragraph coherence point, students are already getting good results with an average score of 85. Students are already able to combine one paragraph with another according to the framework created. Students have no difficulty in developing coherence between paragraphs. The use of conjunctions

carried out by students is also appropriate for the fusion of the first paragraph and so on so that the main idea in the text of local wisdom created does not go wrong (Risdianto et al., 2021)..

For the point of conformity of content with local wisdom, PKBM Huda Wan Nur Langsa students are able to write it appropriately. Students write down local wisdom in Langsa with the correct development in accordance with the facts in the field. The average student develops writings about the events of art in Langsa and the process of customs that are the main attraction of every tribe in Langsa. Local wisdom that becomes an attraction in Langsa, one of which is customary like in the wedding process is what is displayed by students in writing. On content suitability, students who were subject to the study earned a score of 82 on average and earned a good scale.

On the use of the theme, students at PKBM Huda Wan Nur Kota Langsa have scored on a good scale of 85. Students develop themes with local wisdom writing in the form of local stories in Langsa and Aceh in general. In addition, students also write about themes related to art and performance performances, as well as customs in the city of Langsa. Students take on the theme of customs because most can be found facts and data in the field. Customs that develop in Langsa as local wisdom almost every week can be found in various sub-districts and villages in Langsa. Therefore, this is an attraction for students. In addition, the folklore that develops in Langsa is also used as a theme by students.

Spelling is one of the things that is judged in text writing based on local wisdom. The text that is considered is official written text so the use of spelling is considered important for assessment. Students are already able to use spelling well in accordance with the General Guidelines for Indonesian Spelling (PUEBI) provided by researchers at the time of submission of the material. Students already understand the use of punctuation such as titiks, commas, and the use of raw words contained in their respective writings. There are some students who are still mistaken in writing commas because of a lack of understanding of the use of commas. The average score obtained in spelling usage is 87. Researchers will provide additional material for writing commas on written works to make students understand and correct in writing.

In addition to the five things that are the object of the assessment, there is one more thing that is of special concern to researchers in conducting research related to the development of literacy in the multiplatform application based on PKBM Huda Wan Nur Kota Langsa, namely the use of diction. To write a text, the use of diction is considered important. PKBM student Huda Wan Nur is already proficient in determining the diction used in writing local wisdom

texts. Vocabulary chosen to describe words related to local wisdom can already be classified on a good scale. The average value obtained in the use of diction is 82. Therefore, the use of PKBM student diction Huda Wan Nur to write local wisdom texts is good.

Multiplatform Application-Based Learning

Every student at PKBM Huda Wan Nur is known to have adequate device to carry out the online learning process and digital multiplatform (Vishal & Kushwaha, 2018). The school also has a Learning Management System (LMS) that makes it easier for students to get lessons during the covid-19 pandemic (Jun-feng, 2012);(Ødegaard, 2018). PKBM Huda Wan Nur Langsa's learning process still uses face-to-face and online systems in turn. Therefore, the use of Multiplatform Applications for lessons is needed. Based on the research conducted, here is a data on the proficiency of using multiplatform applications for the development of reading-writing literacy of PKBM student Huda Wan Nur to improve the ability to write local wisdom texts. Take a look at the following table:

Table 3. Multiplatform Application Usage Value

Appli-cation	Student ability	Information
Learning Management System (LMS)	82	Good
Google Meet	84	Good
Google Classroom	90	Excellent
Youtube	100	Excellent
Zoom meeting app	84	Good
Instagram	100	Excellent
Average	90	Excellent

In the table, it can be seen that students are already proficient in using multi-platform applications for the development of reading and writing literacy in order to improve the ability to write local wisdom texts. The use of digital media, especially learning applications, has become the main thing in the teaching and learning process during the covid-19 pandemic so that all students understand the procedures for using the application in question. Applications that are often used for learning are LMS and Google Classroom to send material. Meanwhile, to explain the material, the teacher uses the Zoom Meeting application or Google Meet. Furthermore, to study videos and explore local culture and wisdom in Langsa, researchers and teachers use social media applications such as YouTube and Instagram.

CONCLUSION

Based on the results of data analysis, it was found that the calculation of the average value of the student's writing was assessed on the aspects of essay outline, paragraph cohesion, content suitability with Langsa local wisdom, theme development, spelling, and use of diction showing an average score of 84 (good). At the test stage the use of Multiplatform Applications shows a value of 90 (very good). It can be concluded that learning to develop literacy models based on multi-platform applications is feasible to use for the learning process and can increase students' understanding of local wisdom in Aceh. Scientifically, research results can be the basis for school policies to implement multiplatform applications in writing local wisdom texts at PKBM Huda Wan Nur throughout Langsa City. The direction of learning that is currently oriented towards digitalization requires teachers and students to master reading and writing literacy. Its application can be realized in a learning management system (LMS) or relevant multi-platform applications.

REFERENCES

- Agusriadi, A., Elihami, E., Mutmainnah, M., & Busa, Y. (2021). Technical Guidance for Learning Management in a Video Conference with the Zoom and Youtube application in the Covid-19 Pandemic Era. *Journal of Physics: Conference Series*, 1783(1), 012119. <https://doi.org/10.1088/1742-6596/1783/1/012119>
- Ahmad, J., & Wibawa, F. A. (2021). *Peran Literasi Teknologi Dalam Pembelajaran Daring*. 6(2), 7.
- Andriyani, N., & Ningsih, R. (2021). Digital Literacy: Teachers' Perceptions of Using Google Accounts in the Online Learning Process. *Digital Literacy*, 10.
- Anugrah, A., Ibrahim, N., & Sukardjo, Moch. (2021). How Flipped Classroom Helps the Learning in the Times of Covid-19 Era? *JTP - Jurnal Teknologi Pendidikan*, 22(3), 151–158. <https://doi.org/10.21009/jtp.v22i3.17555>
- Arbarini, M., Jutmini, S., & Joyoatmojo, S. (2018). *Effect of Participatory Learning Model on Functional Literacy Education*. 12.
- But, J. C. (2020). Professional Development: Disciplinary Literacy Instruction. In J. C. But (Ed.), *Teaching College-Level Disciplinary Literacy* (pp. 23–53). Springer International Publishing. https://doi.org/10.1007/978-3-030-39804-0_2
- Cahyono, A. H., & Ardhyantama, V. (2020). Pengembangan Literasi Baca Tulis Di Sekolah Dasar Islam Terpadu Ar Rahmah Pacitan. *Alpen*:

- Jurnal Pendidikan Dasar*, 4(1), 8–16. <https://doi.org/10.24929/alpen.v4i1.36>
- Chaiyama, N. (2015). The Development of Blended Learning Management Model in Developing Information Literacy Skills (BL-ILS Model). *International Journal of Information and Education Technology*, 5(7), 483–489. <https://doi.org/10.7763/IJNET.2015.V5.554>
- Darlan, M. N. (2017). *Management of Community Learning Activities Center (CLAC) in District Kotawaringin Timur*. 7.
- Darwin, D., Muliastuti, L., Setiadi, S., & Anwar, M. (2021). *Development of Multimedia-Based Teaching Materials in Mastering Linguistic Aspects*. 11.
- De', R., Pandey, N., & Pal, A. (2020). Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice. *International Journal of Information Management*, 55, 102171. <https://doi.org/10.1016/j.ijinfomgt.2020.102171>
- Djibu, R., & Duludu, U. (2021). Effects of Web-Based Learning and Cultural Literacy Towards Non-formal Educator Performance. *Journal of Nonformal Education*, 7(1), 71–82. <https://doi.org/10.15294/jne.v7i1.28171>
- Dong, X. (2020). Development and Application of Mobile Bookstore Visualization Platform Based on Grid System. *2020 12th International Conference on Measuring Technology and Mechatronics Automation (ICMTMA)*, 352–356. <https://doi.org/10.1109/ICMTMA50254.2020.00084>
- Elihami, E. (2021). *Reconnoitering Education Literacy and Equality: Bibliometrics Analysis of the term "Education Literacy and Equality"*. 7.
- Hardika, H., Aisyah, E. N., & Kurniawan, T. (2020). *Literacy about Covid-19: Trending Words, News Sources, Comprehension, and Community Curiosity in Perspectives Nonformal Education*. 7.
- Hazizah, N., & Ismaniar, I. (2020). *Teachers' Strategies in Preparing Online Learning Digital Media for Developing Children's Literacy Skills*. 5.
- Indriyani, V., Zaim, M., Atmazaki, A., & Ramadhan, S. (2019). Literasi Baca Tulis dan Inovasi Kurikulum Bahasa. *KEMBARA Journal of Scientific Language Literature and Teaching*, 5(1), 108. <https://doi.org/10.22219/kembara.v5i1.7842>
- Jun-feng, B. (2012). Application Development Methods Based on Multi-core Systems. *2012 International Conference on Industrial Control and Electronics Engineering*, 858–862. <https://doi.org/10.1109/ICICEE.2012.228>
- Kanniainen, L., Kiili, C., Tolvanen, A., Aro, M., & Leppänen, P. H. T. (2019). Literacy skills and online research and comprehension: Struggling readers face difficulties online. *Reading and Writing*, 32(9), 2201–2222. <https://doi.org/10.1007/s11145-019-09944-9>
- Laksono, B. A., Supriyono, S., & Wahyuni, S. (2018). Perception of Illiterate Society Toward The Functional Literacy Program. *Journal of Nonformal Education*, 4(2), 131–140. <https://doi.org/10.15294/jne.v4i2.16003>
- Lyons, A. C., Kass-Hanna, J., Liu, F., Greenlee, A. J., & Zeng, L. (n.d.). *Building Financial Resilience through Financial and Digital Literacy in South Asia and Sub-Saharan Africa*. 57.
- Morales, C. (2011). Development of A Multi-Platform (PC, iPad, Mobile) eBook Platform. *2011 ASEE Annual Conference & Exposition Proceedings*, 22.476.1-22.476.8. <https://doi.org/10.18260/1-2--17757>
- Musdalifah, M., Baharuddin, B., Jabri, U., Elihami, E., & Mustakim, M. (2021). Building The Management System: Designs on the use of Blended Learning Environment. *Journal of Physics: Conference Series*, 1783(1), 012120. <https://doi.org/10.1088/1742-6596/1783/1/012120>
- Nurhayati, S., Musa, S., Boriboon, G., Nuraeni, R., & Putri, S. (2021). Community Learning Center Efforts to Improve Information Literacy in the Community for Cyber Crime Prevention during a Pandemic. *Journal of Nonformal Education*, 7(1), 32–38. <https://doi.org/10.15294/jne.v7i1.26883>
- Ødegaard, M. (2018). Inquiry-Based Science and Literacy: Improving a Teaching Model Through Practice-Based Classroom Research. In K.-S. Tang & K. Danielsson (Eds.), *Global Developments in Literacy Research for Science Education* (pp. 261–280). Springer International Publishing. https://doi.org/10.1007/978-3-319-69197-8_16
- Olufunke, M. (2018). Information Literacy and Sustainable Development. *International Review of Management and Business Research*, 7(2), 460–466. [https://doi.org/10.30543/7-2\(2018\)-14](https://doi.org/10.30543/7-2(2018)-14)
- Poerwanti, E., Suwandayani, B. I., & Sombuling, A. (2021). Literacy Skills as an Effort to Maintain Quality Culture in Muhammadiyah Elementary Schools in Malang City During the Covid-19 Pandemic. *Journal of Nonformal Education*, 7(1), 8–13. <https://doi.org/10.15294/jne.v7i1.26429>
- Purohit, H., Bharti, N., & Joshi, A. (2015). Partnering for Promotion of Digital Literacy Among Women in Rajasthan Through Bhartiya Model of Digital Literacy. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2665736>
- Ramandanu, F. (2019). Gerakan Literasi Sekolah (Gls) Melalui Pemanfaatan Sudut Baca Kelas Sebagai Sarana Alternatif Penumbuhan Minat Baca SISWA. *Mimbar Ilmu*, 24(1), 10. <https://doi.org/10.23887/mi.v24i1.17405>

- Risdianto, E., Wachidi, W., Riyanto, R., Alexon, A., Fathurrochman, I., & Kusen, K. (2021). Blended Learning Model Based on Massive Open Online Courses (MOOCs) Assisted by Augmented Reality (BMA) Model as the Electronic Learning Media in the Pandemic Covid-19. *AL-ISHLAH: Jurnal Pendidikan*, 13(1), 228–241. <https://doi.org/10.35445/alishlah.v13i1.470>
- Rosmilawati, I. (2017). *Learning through Individuation: How Indonesian Young People Seek a Personal Growth and Self-Development at Alternative Schooling*. 10.
- Saragih, M., Syukri Nst, H., Harisma, R., & Batubara, I. H. (2021). Digital Literation Models Development Based School Culture to Improve Students' Life Skill in the 21st Century. *AL-ISHLAH: Jurnal Pendidikan*, 13(1), 307–316. <https://doi.org/10.35445/alishlah.v13i1.362>
- Shofwan, I., Raharjo, T. J., Rc, A. R., Fakhruddin, F., Sutarto, J., Utsman, U., Arbarini, M., Suminar, T., Mulyono, S. E., Kisworo, B., Malik, A., Yusuf, A., Ilyas, I., Desmawati, L., & Basrun, M. C. (2019). *Non-Formal Learning Strategy Based On Tahfidz And Character In The Primary School*. 8(10), 6.
- Sinta, T. (2019). *Journal of Nonformal Education*. 6.
- Sujarwo, S., Kusumawardani, E., Trisanti, T., & Santi, F. U. (2021). Women Strengthening Through Information Technology Literacy in Tourist Village. *Journal of Nonformal Education*, 7(1), 112–118. <https://doi.org/10.15294/jne.v7i1.29277>
- Sundari, H., & Leonard, L. (2021). Exploring Needs of Academic Writing Course for LMS in the New Normal. *JTP - Jurnal Teknologi Pendidikan*, 22(3), 140–150. <https://doi.org/10.21009/jtp.v22i3.16073>
- Susanti, W., Supena, A., & Cahyana, U. (2020). Effect of Flippeed Classroom Models and Creative Thinking of Science Literation Students. *Journal of Nonformal Education*, 6(1), 51–60. <https://doi.org/10.15294/jne.v6i1.23936>
- Trisanti, T., & Suharta, R. B. (2018). Model of Collaborative Learning to Improve Student's Learning Ability in Nonformal Education Departement. *Journal of Nonformal Education*, 4(2), 177–186. <https://doi.org/10.15294/jne.v4i2.16007>
- Vishal, K., & Kushwaha, A. S. (2018). Mobile Application Development Research Based on Xamarin Platform. *2018 4th International Conference on Computing Sciences (ICCS)*, 115–118. <https://doi.org/10.1109/ICCS.2018.00027>
- Wahyuni, S., & Etfita, F. (2019). Language Attitude Towards Blended Learning Model For Writing Subject. *AL-ISHLAH: Jurnal Pendidikan*, 11(2), 223. <https://doi.org/10.35445/alishlah.v11i2.141>