Web-based Project-based Learning to Enhance Arabic Language Skills of Madrasah Aliyah Students

Ikhwanur Rahmah, Asrowi, Ahmad Arif Musadad
Universitas Sebelas Maret, Surakarta, Indonesia
Corresponding E-mail: ikhwanurrahmah69@gmail.com

Abstract

The aimed of this study is to analyze the need of learning media, web-based project, as an effort to enhance students' skills in Arabic. This study used descriptive quantitative method. 2 teachers and 15 students in the eleventh-grade are the participants of this study. The data collection techniques used in this study are Arabic language skills tests (speaking, reading, and writing). Data reduction, data presentation, and conclusion presentation are the interactive analytical techniques that used to analyze the results. Based on the results, teachers tended to resist adopting new technologies, using traditional learning media, and using non-project-based teaching materials and methods. Therefore, the initial test results show that students' Arabic language skills were low. It can be concluded that the use of web-based project-based learning will be suitable as a learning media for the process of learning Arabic. The teachers hope that by using this media, students will get more used to practicing their Arabic language skills and improve their skills.

Keywords: *Web, Project Based Learning, Arabic Language Skills, Madrasah Aliyah*

Introduction

Entering the big data era, the development of communication technology is very fast, making distance not an obstacle to getting information from various parts of the world. Therefore, mastering the language is very important because it functions as a tool for humans to understand each other, think and explain everything (Firdausia et al., 2020; Usman, 2016). Languages are the most important means of communication in interacting with anyone in this world. Many languages are created to facilitate communication with others, especially Arabic language (Hidayat, 2012).

Arabic is the fifth most spoken language in the world with 422 million speakers and has developed rapidly not only in the Arab region but also in non-Arabic countries. The Arabic language attracts the interest of millions of people worldwide to learn it, as some of the Islamic terms derived from Arabic have also been taught in Indonesian

training courses. Therefore in learning Arabic, it is necessary to develop language skills to communicate fluently both orally and in writing.

Arabic language skills are among the most important competencies for students studying Arabic as a second or foreign language. Arabic language skills are important to help students academically, another motivation for learning Arabic is learning the culture and getting a job with international institutions located in Arabic-speaking countries (Khasawneh & Khasawneh, 2022). Skills that must be mastered include those that are receptive, namely listening *(istima')* and reading *(qira'ah)*. The productive skills that must be possessed are speaking *(kalam)* and writing *(kitabah)*. By mastering these four language skills *(maharah lughawiyah)* and supported by a good understanding of the linguistic elements above, it is the goal to be achieved when someone learns Arabic (Syagif, 2023). In the context of language skills, some aspects need to be considered as indicators in measuring the mastery of such skills. For example, in the context of reading skills, the aspects to be considered are pronunciation *(makhraj)*, good intonation, and the ability to understand the meaning contained in the reading text (Ulya, 2020). The framework of speech skills, aspects that should be taken into consideration were pronunciation, the grammar used, the vocabulary chosen, the use of the correct grammar, fluency, accuracy of the content of the speaking, and the understanding of the contents of speaking (Saepudin, 2012).

It is frequently observed that even proficient readers of Arabic books, such as the Qur'an and Hadith, struggle to comprehend their content. There appears to be an issue with the Arabic language education process at madrasah and high schools (Zurqoni et al., 2020). According to research on the subject, issues with learning Arabic include curriculum, teacher qualifications, learning resources, and learning orientations that fall short of the language's primary goals (Sarpika et al., 2018; Shamsuddin & Ahmad, 2017). Additional issues with learning Arabic include the pedagogical approach's continued reliance on conventional methods (bin Samah et al., 2016; Sakho, 2012). Moreover, teaching Arabics still teacher-centered and based solely on textbooks (Thomure et al., 2020).

The urgency of this research is to provide a solution to the problem of mastering the Arabic language skills faced by students in Indonesia, especially high school students. This research attempts to explain the need for web media integrated with the project-based learning model (PjBL). This PjBL-based web media is expected to be a solution to improve students' Arabic language skills by making this media one of the learning media. The web is a collection of pages that display information on data, text, images, animated data, sound, and a combination of all of them, static and dynamic, forming series of buildings that are interrelated with a network (Melanda et.al., 2019). Adult computer users, in particular, favor the web as one of their most used programs (Firdausia et al., 2020). Students can improve their language skills, including speaking, listening, reading, and writing, as well as their communicative competence by utilizing technology and the internet (Mubarak, 2021; Zubaidah et al., 2021).

Technology use can also help students become more proficient in speaking, listening, reading, and writing (Hembrough & Jordan, 2020). Some effects of the four foreign language skills are evident when students listen to the language being learned.

Technology gives students more options, and the instructor's ability to set up effective pedagogical tasks to go along with technology, such as videos, is the only restriction (Blake, 2016; Febriani & Anasruddin, 2020). Technology can be used as a tool to improve students' ability to practice the four language skills (Godwin-Jones, 2015). These skills can be trained optimally through interesting collaborations between various learning model and media (Febriani & Anasruddin, 2020). The progress of the web has also influenced the paradigm of society in learning, that is, from learning activities limited by space and time to learning concepts anywhere and anytime, and from printed learning sources to electronic learning resources (Batubara, 2018).

The web-based learning system, utilizing project-based learning can be applied to all subjects taught using project-based techniques (Chatwattana, P., Nilsook, 2017), included in learning Arabic language skills. The Web can make Project-Based Learning features more effective by strengthening interactivity, smoother communication and facilitating learning based on real problems and situations (Basilotta et al., 2020). Project-based learning (PjBL) is a learning model with long-term activities that engage students in designing, creating, and presenting products to solve real-world problems. PjBL is implemented to motivate students to be actively involved and take the initiative to get something they want, be it knowledge, understanding, and skills (Basilotta et al., 2017; Mira & Mansyur, 2022; Wati, 2017).

Numerous projects can be carried out in several methods, particularly for content subjects to enhance their creative, collaborative, and communication abilities andor active-productive language skills (speaking and writing) to improve language competence (Fitriani, L., Arifa, 2018). Employing a project-based learning models to teach speaking abilities helps students become more proficient communicators. Students ' motivation increases through making projects to solve real problembecause what they are doing is relevant to real life (Wati, & Zainurrakhmah, 2022).

Web-based project-based learning means that all learning activities and assignments that students must complete are those on the web with elements of project-based learning (producing products). So that the project-based learning model is not only used by teachers during the learning process but also in the learning media used. Applying PjBL with ICT (in this case using the web as a medium that provides learning materials) can produce a positive learning atmosphere where students can actively participate in knowledge formation activities and acquire skills. In its application, it is reinforced by the highly motivated students and the teacher's educational and technological knowledge (Marwan, 2015).

Based on the results of the analysis of the importance of web and PjBL to the Arabic language skills of students, to solve the problem of Arabic language learning in Indonesia, a learning innovation that can integrate technology and the PjBL model is typically required. Considering the realities of the issues that arise in the field, including web media into the PjBL model can be a creative way to improve students' Arabic language proficiency. In order to develop a web-based PjBL as a learning tool that satisfies the requirements of the content and determines the needs of the students, the study intends to analyze in the form of recognizing the need for models and designs.

Method

The method used in this study is a descriptive quantitative method. This method aims to summarize and explain the numerical data collected. The aim is to provide a clear understanding of the observed variable or characteristic and does not attempt to explain or conclude its cause or cause-and-effect relationship, nor to produce a new theory (Creswell, J. W., & Creswell, 2017; Sugiyono, 2018). This research was conducted from July 2023 to August 2023, located at Madrasah Aliyah Darul Maárif Roka, Bima. Two (2) teachers and fifteen Madrasah Aliyah students in the eleventh-grade are participants in this study. The sample of this study was chosen using the cluster sampling technique, which represented the different student competencies.

Data collection techniques in this study are Arabic language skills tests consisted of speaking skills tests, reading skills tests, and writing skills tests. In addition, observations and interviews were conducted to complement the data acquisition. The instrument used in data collection techniques are observation sheets and lists of questions. Then the data obtained is analyzed with interactive analysis techniques consisting of several procedures:ata reduction, data presentation, and conclusion presentation (Creswell, J. W., & Creswell, 2017; Utami, I. S., & Nurlaili, 2022). The expert evaluation method is used to evaluate the validity of the instruments used in this study. The evaluation results of the experts show that instruments can be used and distributed to students, as well as interviews with teachers (Widoyoko, 2012).

Result and Discussion

The first part will explain the test results regarding the students' Arabic language skills. Furthermore, the results of students' Arabic language skills tests, based on several indicators that experts have determined. There are several questions regarding students' speaking, reading, and writing skills based on the basic "self-introduction" material that students have previously studied. Students' Arabic language skills test are presented in table 1.

Table 1. Students' Arabic Language Test

Skills	Question
Speaking Skills	Students are asked to individually introduce themselves and talk about their dreams in Arabic.
Reading Skills	اِقْرَأْ النَّصَّ! إِسْمِي فَارُوْقٌ . أَنَا طَالِبٌ فِي هَذِهِ الْمَدْرَسَةِ . وَهَذَا أَخِي . إِسْمُهُ صَالِحٌ . هُوَ طَالِبٌ . وَهَذِهِ صَدِيقَتِي . إِسْمُهَا فِطْرِيَةُ . هِيَ طَالِبَةٌ . تِلْكَ مُدَرِّسَتِي . إِسْمُهَا الْأُسْتَاذَةُ نَفِيْسَةُ . هِيَ مُدَرِّسَةُ اللُّغَةِ الْعَرَبِيَّةِ . وَذَلِكَ الْأُسْتَاذُ مَنْصُوْرٌ . هُوَ نَاظِرُ الْمَدْرَسَةِ . أَنْظُرْ! ذَلِكَ السَّيِّدُ عُمَرُ . هُوَ أَمِيْنُ الْمَكْتَبَةِ فِي هَذِهِ الْمَدْرَسَةِ . وَتِلْكَ السَّيِّدَةُ حَفْصَةُ . هِيَ مُوَظَّفَةٌ فِي الْمَكْتَبَةِ . وَهَذَا بَائِعٌ . إِسْمُهُ السَّيِّدُ خَالِصٌ . وَهَذِهِ بَائِعَةٌ . إِسْمُهَا السَّيِّدَةُ فَاطِمَةُ . وَذَلِكَ سَائِقٌ . السَّائِقُ إِسْمُهُ السَّيِّدُ حَفِيْظٌ . أَنْظُرْ أَيْضًا! ذَلِكَ بَوَّابٌ . إِسْمُهُ السَّيِّدُ مَسْعُوْدٌ . هُوَ مِنْ سُوْرَابَايَا . وَتِلْكَ خَادِمَةٌ . إِسْمُهَا نَبِيْلَةُ . هِيَ مِنْ بَانْدُوْنِج .

أَجِبْ وَفْقًا لِلنَّصِّ!

٦. مَنْ السَّيِّد عُمَر؟	١. مَا اسْمُ الطَّالِب؟
٧. مَا اسْمُ الْمُوَظَّفَة فِي الْمَكْتَبَة؟	٢. مَنْ صَالِح؟
٨. مَنْ السَّيِّد مَسْعُوْد؟ مِنْ أَيْنَ هُوَ؟	٣. مَنْ الأُسْتَاذَة نَفِيْسَة؟
٩. مَا اسْمُ الخَادِمَة مِنْ بَانْدُوْنج؟	٤. مَا اسْمُ نَاظِرِ الْمَدْرَسَة؟
١٠. مَا اسْمُ السَّائِق؟	٥. مَنْ صَدِيْقَةُ فَارُوْق؟

Writing skills

رَتِّب الكَلِمَة لِتُصْبِح جُمَلًا مُفِيْدَةً، اِبْتِدَاءً مِنْ الكَلِمَةِ المُلَوَّنَة.

١. مِنْ – الثَّانَوِيَّة – أَنَا – طَالِبٌ – الْمَدْرَسَة – طُلَّاب – الحُكُوْمِيَّة – الإِسْلَامِيَّة

٢. طَالِبَةٌ – مَدْرَسَة – مِنْ – صَدِيْقَتِيْ – الإِسْلَامِيَّة – فَاطِمَة – الثَّانَوِيَّة

٣. هُوَ – أَحْمَد – مَكَّة – سُعُوْدِيّ – هَذَا – مِنْ

٤. إِمَام بُوْنْجُوْل – عُنْوَان – جَاكَرْتَا – الْمَدْرَسَة – الحُكُوْمِيَّة – رَقْمُ ٩ – شَارِع

٥. مَشْيًا – مِنْ بَيْتِيْ – قَرِيْبَة – الْمَدْرَسَة – إِلَى – أَذْهَبُ – لِأَنَّهَا – عَلَى الأَقْدَام

The following are the results of the language skills test, which consists of speaking, reading, and writing skills for 15 students in eleventh-grade at Madrasah Aliyah Darul Maárif. The students consisted of 13 girls and 2 boys.

The first is the result of speaking language test. 3 students introduced themselves and talked about their dreams fluently, using correct vocabulary and grammar. But, they struggled with certain pronunciation aspects, specifically letters ز، ش، ذ، خ, and ع. 9 students partially succeeded in introducing themselves but struggled significantly with discussing their dreams. They could correctly pronounce simple sentences like "اسمي" (my name is...) and "أنا من" (I come from...). The next sentence explains their school and class, but students can not pronounce it well. The choice of vocabulary changes positions in the sentence and does not comply with correct grammatical rules. The last, 3 students failed to introduce themselves adequately and required continuous guidance. They were unable to introduce themselves and tell their dreams well. From the start of their introduction until the end, they must be guided to speak according to instructions. Even though they are guided, their pronunciation is still imperfect and halting, the pronunciation of letters in each vocabulary word is not fluent, and they do not know how to select and arrange vocabulary words into sentences that comply with the rules

of Arabic grammar. Their speech was hesitant and grammatically incorrect. Based on this result, it can be concluded that students' speaking skills are still low.

The second is the result of reading skills. 7 students read the text with few pronunciation errors, good intonation, and unaffected by their native accents. There were still a few errors found in the makhorijul hurf (rules for pronouncing Arabic letters), such as when pronouncing the letters خ، ذ، ش، ز and ع. Next, 8 students read with halting pronunciation, were significantly influenced by their native accents and they required teacher guidance. These students were not able to read the text well, their pronunciation was still halting, sometimes guided by the teacher, and there were still many errors found in the makhorijul hurf (rules for pronouncing Arabic letters), such as when pronouncing the letter خ ، ذ، ش، ز. Some student's intonation when reading sounds influenced by the Indonesian accent or regional language used daily when reading several sentences. Out of the 10 questions given, only a few students were able to answer some of the questions correctly. However, no students could answer all the questions in their entirety. Some of these students appeared to be able to discern the implied meanings within the text, allowing them to answer some of the questions. Based on this result, it can be concluded that students' reading skills are still low.

The last is the result of writing skills. 4 students wrote with correct sentence structure, neat handwriting, and precise word arrangement. 8 students wrote understandable sentences but with structural inaccuracies. 3 students did not attempt the writing tasks. The majority struggled with organizing random words into coherent sentences according to Arabic rules. Students have difficulty constructing sentences, with many not attempting the tasks. Based on this result, it can be concluded that students' writing skills are still low.

Based on the results of observations regarding Arabic language skills learning activities and the use of learning media by students, it was found that students' Arabic language skills learning activities at MA Darul Maárif Roka did not appear optimal. This can be seen when the teacher asks students to talk and read texts about the topic being studied. Most students appear to be having difficulty, stammering, and lacking fluency, selecting inappropriate vocabulary, and pronunciation that is not by proper rules. When the teacher asked questions related to the reading text that the students had read to find out their level of understanding of the reading, some students could not answer at all even though the teacher had helped them by explaining the meaning of the questions and translating the reading text into Indonesian. When the teacher asks students to write, it can be seen that the student's writing is sloppy and difficult to read, and the arrangement of vocabulary in sentences is not in the right place.

The results of further observations regarding teachers and students' use of learning media during Arabic language learning activities. Teachers rarely use interesting learning media such as technology-based learning media. When the researcher conducted interviews directly with students in class, all of the students said that they had smartphones, usually used the web in their daily activity, and were interested in learning using media, especially the web. Based on the results of the researcher's observations of the school's facilities and infrastructure, there is a multimedia lab owned by the school which is only used for students' final exams, but the number of computers

available is insufficient for the number of students so that when it is being used, some students are forced to use personal smartphones. The learning media teachers have used during the classroom learning process so far are only markers and whiteboards. The teacher writes each lesson material which comes from an Arabic textbook published by the Ministry of Religion on the blackboard. There is no variation in the media and learning model used, the learning method used by the teacher is only the lecture method. Therefore, when researchers asked students about the process of learning Arabic language skills, they answered that Arabic was difficult, less interesting, boring, and very foreign to them.

Next, the results of the interview with the deputy principal are presented descriptively. Interviews were conducted regarding the development of students' Arabic language skills at the school level. The school is particularly aware of the necessity of students gaining Arabic language skills, according to information from the deputy principal addressing the development of students' Arabic language skills, considering that MA Darul Maarif Roka is a madrasah under the auspices of the Ministry of Religion and all stakeholders in the school are Muslims, so by mastering Arabic language skills, students can understand the Islamic religion well because every worship performed in it uses Arabic. However, in its development, several obstacles were still found, such as the wishes of teachers and students as well as the abilities of teachers and students themselves. The principal explained further that the school continues to remind and instruct teachers regarding the development of students' Arabic language skills because these Arabic language skills can be one of the outputs for students as madrasa graduates.

Further regarding the level of students' Arabic language skills, especially in eleventh grade at MA Darul Maárif Roka, researchers conducted interviews with the teachers concerned to obtain more detailed information. The teacher explains that during the learning process, teachers sometimes try to improve students' Arabic language skills through certain tasks, such as having conversations in front of the class by memorizing, reading, and interpreting together the reading text and then answering several questions based on the text of the question, as well as compiling random sentences become perfect paragraphs. However, teachers always get responses from students who complain because they have difficulties when doing it. Even though the teacher assisted, the results still did not achieve the desired learning objectives. In the end, teachers will reduce Arabic language skills learning activities so as not to burden students too much. The teacher also explained that she did not have enough time and skills to create interesting learning media for students. Therefore, teachers rely only on monotonous teaching methods.

Teachers also admit that their limited knowledge regarding various types of media and learning models that are interesting and arouse enthusiasm for learning that can be applied to students is one of the reasons for students' low Arabic language skills. Teachers only use textbooks as learning resources, and lecture methods using markers and whiteboards. This obstacle causes students' Arabic language skills from developing both in and outside of class.

The findings of the field students' proficiency in Arabic language tests demonstrated that the students' skills in Arabic, especially at the Darul Maárif Roka, was

low. The difficulty in learning Arabic is its pronunciation, followed by grammar, writing and spelling systems, reading marks, vocabulary memorization, reading comprehension, and alphabet identification. (Aladdin, 2012). Arabic as a medium of communication in Islamic religious activities is ultimately seen as a necessity, not just as a foreign language (Alsubaie, 2022; Jiang et al., 2022; Khan et al., 2021). It is frequently observed that even proficient readers of Arabic books, such as the Qur'an and Hadith, struggle to comprehend their content. There appears to be an issue with the Arabic language education process at madrasah and high schools (Zurqoni et al., 2020). According to research on the subject, issues with learning Arabic include curriculum, teacher qualifications, learning resources, and learning orientations that fall short of the language's primary goals (Sarpika et al., 2018; Shamsuddin, & Ahmad, 2017). Additional issues with learning Arabic include the pedagogical approach's continued reliance on conventional methods (Samah et al., 2016; Sakho, 2012). Additionally, the practice of teaching Arabic remains teacher-centered and solely based on textbooks (Thomure et al., 2020).

As a result of observations on the Arabic learning process, students in the classroom with Arabic language skills (speaking, reading, and writing) are very weak. The learning process takes place conventionally and monotonously, as there is a lack of methods or strategies to improve students' Arabic skills. This is because teachers lack knowledge of learning materials and learning strategies, techniques, media, or even language games (Aziza & Muliansyah, 2020; Febrianingsih, 2021). Throughout the learning process, both teachers and students encountered a number of challenges. The inability of those teachers and students to read Arabic fluently and to master basic vocabulary, the verbal modifications in Arabic, the students' limited learning hours at Madrasah Aliyah, the lack of adequate learning resources, the absence of environmental supports that would allow the students to speak Arabic more often, and the absence of unstandardized Arabic language tests in schools are all contributing factors to the learning difficulties of those teachers and students (Zurqoni et al., 2020).

These problems have become major obstacles to students' development of Arabic language skills. Technology can be used as a tool to improve students' ability to practice the four language skills (Godwin-Jones, 2015). These skills can be trained optimally through interesting collaborations between various learning models and media (Febriani & Anasruddin, 2020). One of the integrations between the model and the media is a web-based project. The web-based learning system uses project-based learning can be applied to all subjects taught using project-based techniques (Chatwattana & Nilsook, 2017) included in learning Arabic language skills. The Web can make Project-Based Learning features more effective by strengthening interactivity and smoother communication and facilitating learning based on real problems and situations (Basilotta Gómez-Pablos et al., 2017; Habib et al., 2020). Teachers realized that the use of technology-based media, especially the web, could be a solution to improving students' Arabic skills. So when discussing the development of web-based media projects to improve students' Arabic language skills, teachers felt interested and hoped that these media could be related to students' needs.

The implications of this research are to provide a solution and insight into web-based media projects created as learning media to improve students' Arabic language skills with teacher guidance independently. The web is one of the most preferred applications by computer users, especially adults. By using the web, students can improve their communicative competence, familiarize themselves with different cultures and strengthen their language skills, such as listening, speaking, reading, and writing (Zubaidah et al., 2021). Many types of projects can be implemented in a variety of ways, especially for active-productive language skills (speaking and writing skills) to improve their language competence and for content subjects to develop their creative, collaboration, and communication skills (Fitriani, L & Arifa, 2018). PjBL is very useful for motivating students' reading skills and language comprehension, enabling students to apply their language skills in meaningful contexts. Students can read and understand texts related to their interests by engaging in projects, increasing motivation and confidence in their language skills (Imbaquingo & Cárdenas, 2023). This study has its limitations, namely, the need for web-based media is limited to learning in Madrasah Aliyah, and the determination of interesting web design can not be done, nor will the stage of development be used in the learning process.

Conclusion

This study concludes that the low Arabic language skills of students at Madrasah Aliyah, are due to their lack of practice in practicing these skills. Consequently, students find applying their Arabic language skills difficult and unfamiliar. The limited role of teachers in the learning process of Arabic language skills also contributes to this problem. Teachers' roles are constrained by their abilities and knowledge of various interesting learning media and learning models that can inspire enthusiasm and be applied to students. Teachers only use textbooks as learning resources and the lecture method with markers and whiteboards as media. Based on theoretical analysis and relevant research that has been carefully conducted and reviewed, it is stated that web-based project media can solve teachers' problems in improving students' Arabic language skills and be something new and interesting for teachers. Various learning activities, practice questions, and web designs are related to the steps and principles of PjBL (Project-based Learning) and the characteristics of students. It is hoped that this project-based media can assist teachers in their efforts to improve students' Arabic language skills.

REFERENCES

Aladdin, A. (2012). Analisis Penggunaan Strategi Komunikasi dalam Komunikasi Lisan Bahasa Arab. *GEMA Online® Journal of Language Studies*, *12*(2).

Alsubaie, F. B. S. M. (2022). Arabic Language Use And Islamic Education In Teach-ing Value To Graduates In Saudi Universities. *Ijaz Arabi Journal of Arabic Learning*, *5*.

Aziza, L. F. & Muliansyah, A. (2020). Keterampilan Berbahasa Arab Dengan Pendekatan Komprehensif. *El-Tsaqafah : Jurnal Jurusan PBA*, *19*(1).

Basilotta Gómez-Pablos, V., Martín del Pozo, M. & García-Valcárcel Muñoz-Repiso, A. (2017). Project-based learning (PBL) through the incorporation of digital technologies: An evaluation based on the experience of serving teachers. *Computers in Human Behavior*, *68*.

Batubara, H. H. (2018). *Pembelajaran berbasis web dengan moodle versi 3.4*. Deepublis.

Bin Samah, R., Puteh-Behak, F., Mat Saad, N. S., Mohd Ali, S., Darmi, R. & Harun, H. (2016). Effective Methods in Learning Arabic Language as a Foreign Language. *Mediterranean Journal of Social Sciences*, *7*(3).

Blake, R. (2016). Technology and the four skills. *Language Learning and Technology*, *20*(2).

Chatwattana, P., Nilsook, P. (2017). A web-based learning system using project-based learning and Imagineering. *International Journal of Emerging Technologies in Learning*, *12*.

Chatwattana, P. & Nilsook, P. (2017). A web-based learning system using project-based learning and Imagineering. *International Journal of Emerging Technologies in Learning*, *12*(5).

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Febriani, S. R. & Anasruddin, A. (2020). Technology for Four Skills Arabic in the Era Emergency of Covid-19 in Indonesia. *Ta'lim al-'Arabiyyah: Jurnal Pendidikan Bahasa Arab & Kebahasaaraban*, *4*(1).

Febrianingsih, D. (2021). Keterampilan Membaca Dalam Pembelajaran Bahasa Arab. *SALIMIYA: Jurnal Studi Ilmu Keagamaan Islam*, *2*(2).

Firdausia, A., Asrori, I. & Ahsanuddin, M. (2020). Pengembangan Media Pembelajaran Bahasa Arab Berbasis Web Offline pada Siswa Kelas X SMA Negeri 8 Malang. *Al-Musannif*, *2*(2).

Fitriani, L., Arifa, Z. (2018). Project-based Learning in Promoting Active Learning for Arabic as Foreign Language Learners. *Proceedings of the 1st International Conference on Recent Innovations*.

Godwin-Jones, R. (2015). Contributing, creating, curating: Digital literacies for language learners. *Language Learning and Technology*, *19*(3).

Habib, A., Astra, I. & Utomo, E. (2020). Habib, Ahmad, I. Made Astra, and Erry Utomo. "Pemanfaatan Multimedia Interaktif: Pengembangan Media Pembelajaran Berbasis PjBL (Project Based Learning). *Prosiding Seminar Dan Diskusi Pendidikan Dasar*.

Habib, A., Astra, I., Utomo, E.: Habib, Ahmad, I. Made Astra, and E. U. (2020). Pemanfaatan Multimedia Interaktif: Pengembangan Media Pembelajaran

Berbasis PjBL (Project Based Learning. *Prosiding Seminar Dan Diskusi Pendidikan Dasar.*

Hembrough, T. & Jordan, J. (2020). Creating a digital writing classroom: A mixed methods study about a first-year composition tablet initiative. *International Journal of Instruction*, *13*(2).

Hidayat, N. S. (2012). Problematika pembelajaran bahasa Arab. *Jurnal Pemikiran Islam, 37(1).*

Imbaquingo, A., Cárdenas, J. (2023). Project-Based Learning as a Methodology to Improve Reading and Compre-hension Skills in the English Language. *Educ Sci (Basel)*, *13.*

Jiang, P., Akhter, S., Azizi, Z., Gheisari, A. & Kumar, T. (2022). Exploring the role of content and language integrated learning approach in developing transversal skills in university students with respect to the mediating role of emotional intelligence. *Frontiers in Psychology*, *13.*

Khan, R. M. I., Kumar, T., Supriyatno, T. & Nukapangu, V. (2021). The Phenomenon of Arabic-English Translation of Foreign Language Classes During The Pandemic. *Ijaz Arabi Journal of Arabic Learning*, *4*(3).

Khasawneh, N. A. S. & Khasawneh, M. A. S. (2022). Linguistic Needs of Non-Native Students of Arabic Language at Saudi Universities. *International Journal of Language Education*, *6*(3).

Marwan, A. (2015). Empowering English through project-based learning with ICT. *Turkish Online Journal of Educational Technology*, *14*(4).

Melanda, D., Surahman, A., Yulianti, T. (2023). *Pengembangan Media Pembelajaran IPA Kelas IV Berbasis Web (Studi Ka-sus : SDN 02 Sumberejo)*, *4.*

Mira Shodiqoh. M Mansyur. (2022). Reaktualisasi Project Based Learning Model Dalam Pembelajaran Pembelajaran Bahasa Arab. *Tanfidziya: Journal of Arabic Education*, *1*(3).

Mubarak, F. (2021). The Innovation of Multimedia-Based Arabic Language Learning. *Turkish Journal of Computer and Mathematics Education*, *12*(14).

Saepudin. (2012). *Pembelajaran Keterampilan Berbahasa Arab (Teori dan Praktik)*. TrustMedia Publishing.

Sakho, M. L. (2012). *Teaching Arabic as a Second Language in International School in Dubai A case study exploring new perspectives in learning materials design and development.*

Sarpika, E., Hambali, H. & Arief, T. (2018). Pengaruh Pembelajaran Konstruktivisme terhadap Kemampuan Menulis Siswa pada Mata Pelajaran Bahasa Indonesia

Kelas V SD Negeri Mangasa I Kecamatan Somba Opu Kabupaten Gowa. *JKPD (Jurnal Kajian Pendidikan Dasar)*, *2*(1).

Shamsuddin, S. M., & Ahmad, S. S. H. (2017). Contemporary issues of teaching Arabic in Southeast Asian Countries (Brunei, Malaysia and Indonesia for the example). *Ournal of Research in Humanities and Social Science*, *5*(6).

Sugiyono. (2018). *Metode penelitian kuatintatif , kualitatif dan R & D*. Alfabeta.

Syagif, A. (2023). Paradigma Pembelajaran Bahasa Arab Di Era Society 5.0. *FiTUA: Jurnal Studi Islam*, *3*(2).

Thomure, H. T., Kreidieh, S. & Baroudi, S. (2020). Arabic children ' s literature : Glitzy production , disciplinary content Publishing children ' s literature in Arabic. *Issues in Educational Research*, *30*(1).

Ulya, L. R. (2020). *Penggunaan media sunduuqus sirri (kotak rahasia) untuk meningkatkan penguasaan kosakata bahasa Arab (mufradat) siswa kelas V MI Muhammadiyah 02 Solokuro Lamongan*.

Usman, M. I. (2016). Pengaruh Kreativitas Dan Motivasi Belajar Siswa Terhadap Prestasi Belajar Bahasa Arab Di Ma Ddi Al-Badar. *Lentera Pendidikan : Jurnal Ilmu Tarbiyah Dan Keguruan*, *19*(1).

Utami, I. S., & Nurlaili, L. (2022). Optimalisasi peran sekolah dengan analisis interaktif bagi penguatan pendidikan karakter. *Jurnal Moral Kemasyarakatan*, *7*(1).

Wati, W. R. (2017). Project-Based Learning for Improving Motivation and Student's Speaking Ability in Arabic Teaching and Learning. *Proceeding of International Conference on Islamic Education (ICIED)*, *2*(1).

Wati, W.R., Zainurrakhmah, Z. (2022). Efektivitas Pembelajaran Berbasis Proyek Untuk Meningkatkan Maharah Kalam. *Borneo Journal of Language and Education*, *2*.

Widoyoko, E. P. (2012). *Teknik penyusunan instrumen penelitian*. Pustaka Pelajar.

Yaumi, M. & Damopolii, M. (2019). Model Integrasi Teknologi Informasi dan Komunikasi dalam Pembelajaran Jarak Jauh. *Al-Musannif*, *1*(2).

Zubaidah, Kardena, A., Shalihah, S., Hodijah, O., Afrida, Y. & Safitri, L. (2021). Web-based e-learning Application for learning Arabic language. *Journal of Physics: Conference Series*, *1779*(1).

Zurqoni, Retnawati, H., Rahmatullah, S., Djidu, H. & Apino, E. (2020). Has arabic language learning been successfully implemented? *International Journal of Instruction*, *13*(4).