Strategies for Learning Arabic from Home at Islamic Boarding Schools During the Covid-19 Pandemic

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Article Information:	ABSTRACT
	The current pandemic situation, which requires the learning process to be carried out from home online, makes it a challenge to learn Arabic. Initially, this policy was very much accepted by learners and educators with excitement. However, the reality is that this policy makes the learning process difficult to implement optimally. This research uses a qualitative descriptive method by collecting all data sources. Data source collection is carried out by interviewing teachers and students and documentation. Qualitative studies are carried out to analyze the problems faced by students and offer several possible recommendations to improve the quality of teaching Arabic as a foreign language based on student perceptions, taking into account the social context experienced during the learning process of the 2020-2021 academic year. The purpose of this research is to find problems that are being faced by students and educators in Islamic boarding schools during the pandemic and find the right solution to solve the problem so that the right strategy can be found for learning Arabic during this pandemic for a number of Islamic boarding schools. **Keywords**: *learning strategies, Arabic learning, covid-19 pandemic*

INTRODUCTION

Language is an important thing for humans because language functions as a human communication tool (Yule, 2020)as well as a tool for conveying ideas or ideas and feelings ADDIN ZOTERO_ITEM CSL_CITATION The American Diabetes Association (ADA) "Standards of Medical Care in Diabetes" includes the ADA's current clinical practice recommendations and is intended to provide the components of diabetes care, general treatment goals and guidelines, and tools to evaluate quality of

care (Jain dkk., 2020). Members of the ADA Professional Practice Committee, a multidisciplinary expert committee are responsible for updating the Standards of Care annually, or more frequently as warranted (YiĞiT & Işik, 2020). For a detailed description of ADA standards, statements, and reports, as well as the evidence-grading system for ADA's clinical practice recommendations, please refer to the Standards of Care Introduction (American Diabetes Association, 2020). As life goes by, languages continue to develop more and more and more diverse, including Arabic, English, Chinese, Korean, Spanish and others. And among the languages already mentioned, Arabic is the oldest language that has been used the longest (Husain & Uzuner, 2021) and among international languages (Szczepek Reed dkk., 2020). Arabic is also the language of the Qur'an which is a guide for the life of Muslims (Zhang dkk., 2019). This requires Muslims to know Arabic (Brosh, 2019). The Arabic language has been introduced from an early age and is taught in kindergarten, Ibtidaiyah, Tsanawiyah, Aliyah (Ardoin & Bowers, 2020), Islamic boarding schools, and even in universities (Abdi dkk., 2019). In addition, the Arabic language has a very crucial and strategic position in the study and development of Islamic sciences, even in Islamic civilization (Chouikhi dkk., 2021). In other words, Arabic is not only a language of communication but a language of science that can accommodate and transmit matters of thought and scientific works.

According to Asrori, the nature of learning Arabic for social communication needs (Jatmiko dkk., 2024). Arabic language learning aims to allow students to interact and communicate using Arabic (Althagafi dkk., 2021). since the establishment of Islamic boarding schools and madrasahs, Arabic lessons have been the core lesson. But until now, there are still many parties who are opinionated those Arabic lessons are difficult to learn, so many do not like Arabic lessons (Z. Li dkk., 2019). In terms of teaching, there are also many problems encountered (Ting dkk., 2019). From that, educators must implement effective and efficient learning strategies in order to create a learning atmosphere that is liked by students so that students are interested in learning Arabic. For this reason, strategies must be used so that Arabic learning achieves success.

The development of Arabic language learning at that time was not entirely based on satisfactory Arabic learning results. Meanwhile, Arabic teaching materials become less interesting and do not suit the needs of students (Bruggeman dkk., 2021). The Arabic curriculum is structured according to various aspects, including the needs of students (Muhsin & Ahmad, 2019) the community (Fauzi, 2020), and educational stakeholders (Al-Thani dkk., 2021). Arabic cannot be considered only as a religious language but also as a world language (Levine dkk., 2020). The international community, especially developed countries such as Europe and the United States, has begun to pay attention to the learning and use of this language as a means of communication (Botero dkk., 2021). Since the recognition of the Arabic language by the International world (Chengaiyan dkk., 2020), it is with this it increasingly clear that the Arabic language occupies an important place in the International arena.

Ideal Arabic learning is one that allows students to master four language skills (maharah istima', kalam, qira'ah and kitabah) in proportion (Akzam dkk., 2021). Indeed, Arabic not only functions passively, that is, as a means of understanding (*al fahm*) (Ulfa, 2018) what can be heard, news texts, readings and speeches, but also has a positive function, that is, understanding (*al ifham*) others orally and vice versa (Tlili dkk., 2022). Written communication (Giordano dkk., 2019). Research also shows that the ability to use language as a means of communication is one of the basic keys to human success in life (Antony-Newman, 2019). (a) most of the teacher's time is devoted to learning and family activities, so there is little opportunity to be more creative in developing learning materials from Arabic; (b) less supportive facilities and environments (libraries and media) (Aubrey dkk., 2022); and (c) the desire to improve exists (Hwangbo dkk., 2019), but the necessary opportunities and means are not available(Subur, 1970).

Learning Arabic has tremendous challenges, where this way of teaching Arabic lessons cannot be equated with teaching a child to read the Qur'an, let alone teach other languages (Ribeiro dkk., 2021). To be able to understand Arabic is not enough just a matter of hours or a matter of days (Ferjan Ramírez dkk., 2020). However, it takes quite a long time (C. Li dkk., 2019). Therefore, learning Arabic requires the right strategy so that the learning objectives are conveyed. Learning strategies are how the steps or rules, or ways educators apply how to convey material from opening to closing in the learning process to students (Pinquart & Ebeling, 2020). Strategies are used to make it easier for learners to receive material delivered by educators (Alnahdi, 2019). And the selection of this learning strategy is very important to achieve learning objectives and improve the quality of Arabic learning (Serevina & Hamidah, 2022). Learning strategies are designed before the learning process is implemented and are adjusted to the material to be delivered (Zhu dkk., 2019). Therefore, educators are required to always innovate with strategies and ways of teaching that are fun in learning Arabic in order to change students' mindsets regarding difficulties in learning Arabic.

Moreover, currently, the world is faced with a situation that is very disturbing for residents, namely the Covid-19 pandemic (Alshdaifat dkk., 2021). COVID-19, known as 2019-nCoV, is a novel coronavirus disease that became known in late December 2019 in Wuhan, China (Paico Campos dkk., 2023). Coronaviruses are a large family of viruses that usually attack the respiratory organs (Conti dkk., 2020). The name comes from the Latin word "Corona", which means a crown due to the sharp edges that surround this virus (Rosowsky, 2019). These viruses act more like highly contagious influenza-like viruses (Garfin dkk., 2020) faster than scientists have found in relatives of slow-moving viruses, SARS and MERSS (Alrefaie dkk., 2020). The current condition is a very critical public health problem and requires proactive measures to protect society (Sharif Matthews & López, 2019). Every day the number of cases is getting higher, which eventually has an impact on the obstruction of various sectors. Inevitably, every State is obliged to immediately make changes in the sectors of life. The effect caused by this virus is so great (Ghani dkk., 2019). The handling of this virus

affects many fields, including the field of education (Toivonen dkk., 2019). So those appropriate efforts are needed so that learning can take place during the COVID-19 pandemic. In order to prevent the transmission of Covid-19, the Ministry of Education and Culture issued three circulars related to the prevention and handling of Covid-19 (Abdrakhmanova dkk., 2021). Regarding Instruction regarding the learning process from home, each school has different strategies to make it happen, both public and private schools. This is related to learning from home involving teachers and students through Distance Learning (Yoon dkk., 2020). All activities at the educational level are required to keep a distance as well as the delivery of material delivered in their respective homes (Deiri, 2023). In addition, it also concerns school readiness, infrastructure, human resources for teachers, students and parents. One of the strategies used is online learning or learning from home (Amin & Badreddine, 2020). Even if learners are at home, educators must ensure that the learning process continues as it should.

The provisions of the BDR are as follows: a. *Homeschooling* through e-learning is implemented to provide a meaningful learning experience for students. It is also intended to reduce the burden on students to achieve all curriculum achievements for grade advancement and graduation requirements; b. *Homeschooling* can focus on life skills education related to the Covid-19 pandemic (Saada & Gross, 2019); c. Learning activities and tasks at home may vary between students, taking into account gaps in access/facilities for learning at home; d. Indications or products of learning activities from home receive qualitative and useful feedback from teachers without having to provide quantitative value (Karlsson dkk., 2020). For some of the above provisions, every school has the freedom to innovate in making it happen. Like related examples of providing meaningful experiences for students, schools manifest in a variety of ways. In early December 2020, it was discovered in Indonesia that life skills education is associated with the quality of teachers, the availability of facilities and infrastructure, and the learning content presented. Based on this, a learning strategy during a pandemic called BDR (Learning from Home) was designed.

This learning from home strategy or known as BDR, is a solution to the problems that exist in learning during the COVID-19 pandemic. This strategy is an effort to provide optimal educational services. In BDR, teachers are also required to prepare learning tools that allow students to learn from home (Ekowati & Suwandayani, 2021). This situation allows teachers to change their teaching and learning strategies (Abbas dkk., 2021). The use of appropriate teaching strategies and teacher behaviours and attitudes in managing the teaching and learning process is urgently needed by students during the Covid-19 pandemic, namely online learning in the home learning program (Chekroud dkk., 2021). The right learning strategies are used to answer the mental health needs of children, especially in the field of trauma, which has become a national public health concern and has an impact on various other fields (Wardani & Ayriza, 2020). In addition, the strategies carried out in Islamic boarding schools not only maintain the quality of learning. But also to maintain the existence of the school.

Therefore, it is necessary to conduct more in-depth research related to the BDR strategy carried out by the Al-Barokah Dharmasraya Islamic boarding school. This, directly or indirectly, means that each school has different preparations and practices for implementing different learning strategies from home.

Therefore, in the description above, this study aims to examine learning strategies at home during the COVID-19 pandemic at the Dharmasraya Islamic boarding school. To answer and solve this problem, many researchers and experts are studying and analyzing e-learning. Previous research has included online learning during the pandemic (Surani & Hamidah, 2020). In addition to some of the things previously described, the novelty proposed in this study involves analysis as a descriptive explanation of learning strategies during the pandemic applied at The Islamic Boarding School. Based on the description above, this learning research and innovation is expected to contribute to policymakers, principals, teachers, and parents. From the scientific side, the results of this study provide a new paradigm for online learning during the COVID-19 pandemic.

RESEARCH METHODOLOGY

This analysis uses qualitative research methods with a descriptive approach. Qualitative data are a reasonable source and process human descriptions and explanations. With qualitative data, chronology and interpretation can be clarified (Dale Bloombarg, Linda dan Volpe, 2019). The qualitative approach is intended to understand phenomena about what the research subjects experience (Hidayat & Setyanto, 2020), such as behaviour, perception, motivation, action, and so on, holistically, and make use of descriptions in the form of words and language, in special natural contexts and by utilizing various scientific methods. Therefore, this qualitative descriptive study will explain a) Learning from Home Strategies (BDR), and b) The strengths and weaknesses of any learning from home strategies. As another qualitative descriptive study, data collection in this study used open structured interviews (Creswell & Clark, 2017).

The data in this study was compiled through several techniques, namely interviews and data analysis. The interview process is conducted online through WA. Interviews were conducted to support research data conducted on students and teachers who taught Arabic at the boarding school. In addition, researchers also conduct questionnaires with *google forms*. With this questionnaire, researchers can see how students respond to Arabic learning strategies applied by educators during the pandemic. This is also a benchmark for the effectiveness of implementing learning strategies carried out by educators during the pandemic. Data analysis in this qualitative study begins at the time the data collection takes place and after the data collection is completed within a certain period of time. Data analysis using content analysis techniques. Activities in data analysis include data reduction that summarizes, selects points, focuses on important things, and looks for themes and patterns. In addition, the data view organizes data arranged in relationship patterns so that it is easier to understand. Finally, drawing conclusions/verification is to conclude that the data that

was originally compiled is temporary and will change if no substantial evidence is found that supports it at the next stage of data collection. If the conclusions put forward at an early stage are supported by valid and consistent evidence by the time the researcher returns to the field to collect data, then the conclusions put forward are considered credible conclusions.

RESULT AND DISCUSSION

We know that the existence of teachers cannot be replaced, but there need to be appropriate strategies to understand that teachers need to be supported in order to disseminate knowledge in a more interactive and fun way. As we know, the government has taken a policy that all areas of education are not allowed to carry out the learning process face-to-face in order to overcome Covid-19. Therefore, educators need to apply the right strategies in the learning process from home. This study aims to analyze learning strategies at home and the advantages and disadvantages of each learning strategy at home. Based on interviews with teachers and students who stated that this learning from the home strategy is very less than optimal because students find it difficult to understand the material when given from home, and students also feel bored with learning from home. Al-Barokah Dharmasraya Islamic boarding school applies a strategy of learning from home in sync and asynchronously. This strategy is carried out by optimizing social media, which takes place every day. Social media is used to send learning packages, media, teaching materials, LKS and student evaluation links (Salamah, 2017). In addition, social media is also used to collect the results of student work every day. Based on the results of interviews through google forms with teachers and students, learning from home is carried out online, and still using the *WhatsApp* application on *smartphone devices.* Teachers send packages of materials, teaching materials, media, LKS and student evaluation links to students through *WhatsApp groups,* either through parent groups or their respective class groups. For example, Monday, there is an Arabic lesson, and then the materials and assignments will be sent by the subject teacher according to the schedule; at the time of the Arabic lesson.

The submission of the material is only written and linked directly to the page you read, remember, and complete. If any student does not understand the subject or finds it difficult to understand the subject while working on the assignment, the student can always ask the teacher about the teacher's plan via WhatsApp. According to an Arab teacher interviewed at Pesantren Al-Barokah, students' learning disabilities were found to vary due to several factors. One of them is the support of parents of students who are studying. If a student has busy parents (career), students and parents need more help from the teacher both in completing the task and understanding the material. In this case, the teacher has an additional task, and the teacher conveys understanding not only to the student but also to his parents. But the difference is that the understanding of parenting is related to the completion of daily tasks. Learning from home, on the other hand, has additional benefits for parents. In other words, it promotes intimacy between

families. According to parents, the tasks assigned by the teacher involve more family members.

Therefore, studying from home can increase your intimacy with other family members. In addition, learning from home is an incentive for students to be more environmentally friendly. The utilization of the environment is also part of various learning packages from home. Of course, the condition of such students depends largely on the support of their parents. If many students are left by their parents to complete tasks independently, the daily teaching material package will be regarded as a burden on students. At this point, teachers provide a lot of support through activities that are observed synchronously on social media. Therefore, according to parents, the collection of assignments at a maximum of 19:00 in the evening is very humane for all students with different needs. This means that after work, all parents still have time to accompany their children to study and complete tasks. On the other hand, the time students do not do homework is used for character recognition activities and the character memory of the Qur'an. Especially to study and memorize the characters of the Qur'an according to their level. As a boarding school, we have set a goal to remember the short letter of the Qur'an to all students. Therefore, learning from home is synchronous and asynchronous. However, this strategy is implemented by providing learning packages every day. With the consent of teachers, students and parents, synchronization activities will be carried out to take care of students.

The results of this analysis are related to the perception of learning from home strategies in Arabic language learning during the Covid-19 pandemic, measured by interviewing students through a google form, and as many as 27 respondents of students of al-Barokah Dharmasraya Islamic boarding school by providing ten questions, researchers found data through interviews in a google form that had been filled in so as to find the following data results:
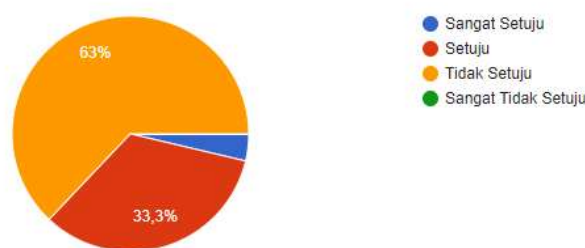

Figure 1. Effective strategy (BDR) used

Based on the picture above, it can be seen how the perception of students related to learning from home strategies in learning Arabic at Islamic boarding schools during the Covid-19 pandemic. In this analysis, researchers obtained data that the strategy of learning from home in Learning Arabic in Islamic boarding schools during the Covid-19 pandemic was effectively used. The answer opinion was very minimally obtained by

7.4%; the affirmative answer received a lot of support from 48.1%, and dissenting answers of 44.4%, whereas the answer strongly disagrees no one agrees with it. With the results of the analysis, it is known that the students of the Al-Barokah Dharmasraya Islamic boarding school mostly agree with the existence of the learning from home (BDR) strategy effectively used in Arabic language learning in Islamic boarding schools during the Covid-19 pandemic. One of the things that cause many students to agree with the statement that the learning from home (BDR) strategy is effectively used in Arabic language learning during the Covid-19 pandemic is because this strategy facilitates the learning process during the Covid-19 pandemic where the learning process should not be done offline (*face to face*). And with this strategy, students can access the subject matter very easily.
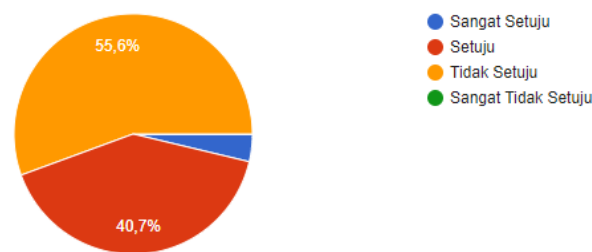

Figure 2. Students Follow the Lessons Well

Based on the picture above, which describes the Santri Pondok Pesantren, they can follow the learning process well using the BDR strategy. The researcher stated the results of his analysis that the students of Islamic boarding schools could not follow Arabic learning properly using the BDR strategy. This was in accordance with the student's answers in answering the statements submitted by the researchers. The data obtained from this analysis agreed that students followed the lesson well by 40.7%, and the acquisition of data stated that they disagreed that students followed the lesson well by 55.6%, whereas the statement strongly agrees and strongly disagrees that no one chooses any of the students. We can realize that when students learn from home, their focus is not only one. At the hour that they should have started studying, they were still working at home, just eating, just taking a shower or even those who had a younger brother doing the study while taking care of their sister. That is why many disagree with the statement that students follow the lesson well using the BDR strategy.
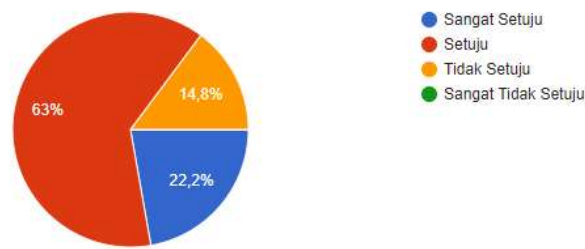
Figure 3. BDR strategy is able to increase interest in learning Arabic for Islamic boarding school students

Based on the picture above, we can conclude that the BDR strategy is not able to increase the interest in learning Arabic for Islamic Boarding School students. There are four options proposed by the researcher in answering the statement. The data obtained from the analysis, namely agreeing that the BDR strategy was able to increase interest in learning Arabic for Islamic Boarding School students by 33.3%; and those who expressed disapproval of the BDR Strategy were able to increase interest in learning Arabic for Islamic Boarding School students by 63%; whereas this statement strongly agrees and strongly disagrees no one chooses one. From what has been previously stated that if these students learn from home, their focus will be split. This is supported by technological advances that allow students to access various kinds of things that can have both positive and negative impacts later. Positive things like students can access teaching materials not only from teachers or from books. Meanwhile, negative things such as students can access games or things that should not be accessed because this can trigger the concentration of student learning which results in a lack of interest in learning Arabic for Islamic boarding school students.
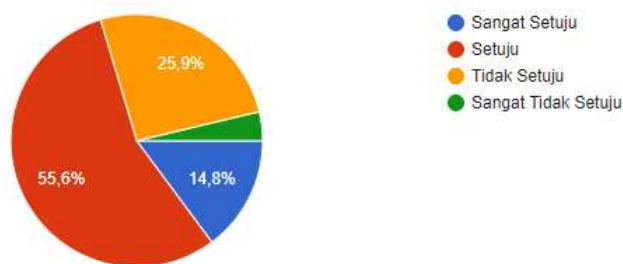

Figure 4. Teachers are very instrumental in the use of BDR strategies in the learning process

Based on the picture above, it can be seen that the picture describes the teacher's role in the use of BDR strategies in the learning process. The data obtained in the analysis were students who agreed very much as 22.2%; students who agreed with 63%; and students who expressed disapproval as much as 14.8%; whereas the statement stating strongly disagrees no one voted. The analysis carried out by researchers at the Al-Barokah Dharmasraya Islamic boarding school stated the results that teachers play a

very important role in the use of BDR strategies in the learning process. We can realize that when learning is carried out at home, the teacher not only provides understanding to the students but also gives understanding to the guardians of the students. In addition, the role of teachers is indeed very much needed in the use of this BDR strategy, especially if learning is carried out online. The learning process is very dependent on the teacher.
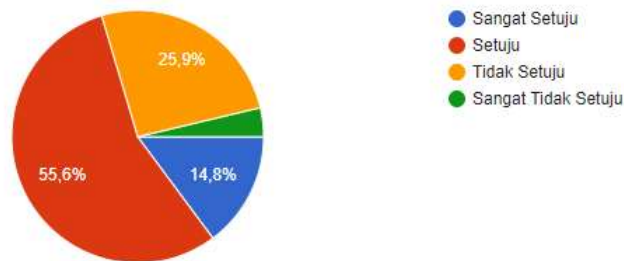

Figure 5. BDR strategies improve the professionalism of teaching a teacher

Based on the picture above, it can be seen how the perception of students in the BDR Strategy statement improves the professionalism of teaching a teacher. There are four options proposed by the researcher in his statement, and the data obtained are students who strongly agree the BDR strategy improves the teaching professionalism of a teacher by 14.8%; students who agreed the BDR Strategy increases the teaching professionalism of a teacher by 55.6%; students who expressed disapproval of the BDR Strategy to improve the teaching professionalism of a teacher by 25.9%; and the statement strongly disagrees with nothing. From the analysis of these statements carried out at the Al-Barokah Dharmasraya Islamic boarding school, conclusions can be drawn to bring the BDR strategy to improve the professional teaching of a teacher. This is because when the teacher delivers the material, assignments and so on, it demands the teacher's creativity. Because in the conditions of learning from home, students will feel bored and saturated if the learning process is carried out monotonously only. Therefore, the existence of this BDR strategy is able to improve the professional teaching of a teacher.

When learning from home using online learning directly or indirectly, schools must follow the online learning path (Kurniasari dkk., 2020). Complete online learning is carried out from grade 1 to grade 6 of elementary school, according to Circular Letter (SE) Number 4 of 2020, dated March 24, 2020, namely Learning from Home (Arifa, 2020). Therefore, when learning from home occurs, learning can already run well, and even development has been carried out in the learning process in the form of applications so that it becomes a positive value of learning from home, where schools carry out learning oriented in the 21st century (Costa dkk., 2021). Many have been forced to prepare for face-to-face learning but have now developed into an online learning system. For schools that are accustomed to using technological devices in their

teaching and learning activities, of course, this is an opportunity for all elements of the school to develop along with technological (Plass dkk., 2020). Based on the results of interviews with the head of the Islamic boarding school foundation, teachers, students and guardians of students in mid-June 2020, information was obtained that the Islamic boarding school had been giving online assignments since the Covid-19 pandemic in early March 2020.

But as something new, learning from home using online platforms, students rely heavily on teachers (Costa dkk., 2021). The complexity of technology has not been able to encourage smooth learning without good internet access (Leonard, 2016). In addition, parental mentoring is one of the keys to successful learning from home (Jasinski, 2012). Habituation to the use of technology for the community and parental assistance is part of the success of learning from home. During learning activities from home, the teacher also has additional tasks. Not only does it help students to learn, but it also teaches parents to be able to access technology. Therefore, the school has taken various policies in responding to learning strategies from home during the Covid-19 period. This includes habits carried out in the family environment. The use of applications and social media in the learning process supports paper-saving programs as a form of caring for the environment.

The platform used by teachers in the implementation of learning from home is expected to not only focus on academic or cognitive achievement but also emphasize the development of life skills and character, such as independent, disciplined and responsible character (Kautsar & Edi, 2017). This is one of the keys to meaningful and enjoyable learning for students (Ansari dkk., 2016). The period of handling the Covid19 pandemic has become a medium for increasing teacher human resources directly or indirectly (Ansari dkk., 2016). The success of learning from home by implementing various strategies is one of the benchmarks for the quality of education in this country (Arifa, 2020). In the end, it will appear directly or indirectly that schools are ready to accept any change and those that are not. Especially the changes in the face of changing times and changing generations in the present and future. Based on the results and discussions, this research is limited to Islamic boarding schools in Indonesia. This research also provides benefits for teachers, principals and parents in designing learning during the pandemic. This strategy can be used as an alternative to learning with implementation guidance. This makes it easier for stakeholders to carry out learning.

CONCLUSION

Learning Arabic, which is often considered difficult, causes obstacles and slows down the implementation of the Arabic learning process. This happened because the students' interest in learning Arabic was very minimal because of their assumptions. Especially now with the Covid-19 pandemic, which requires learning should not be done offline (*face to face*). With that, the Al-Barokah Dharmasraya Islamic boarding school established learning from home (BDR) strategy to overcome these existing problems in order to facilitate the process of learning Arabic to continue to take place

properly. With it, educators and learners can access a number of applications that can help the process of learning Arabic. Students can access materials, LKS, teaching materials and assignments given by teachers through *WhatsApp Group* or can also use other applications. And can carry out the learning process as usual according to the schedule. This strategy also strengthens the relationship between students and their families, where parental or family guidance is needed in this regard.

SUGGESTION

The teaching and learning process at Islamic boarding schools must be adjusted to the needs of students, and the material to be delivered using the right strategies and media is again easily accessible. In addition, educators who are constantly looking for ways to solve the problems of all students ensure that the learning process carried out achieves the desired results. If it can be applied continuously, then the world of education can develop rapidly. But currently, as summarized in this study, learning is still described as very minimal. This can be addressed in all sectors, including the actor sector, the movement sector, and the education system provider sector. Whatever the government decides must be ready. It is important to be kind and not give in to the interests and abilities of educators and students in the educational community of this place. Let's think together of the right solution for today's dynamic world. The research work made by the author still has many mistakes, mistakes, or shortcomings. Therefore, a system that provides constructive criticism, opinions and suggestions helps writers to improve themselves in the future and creates sophisticated articles that are thorough, creative, innovative and follow the rules of correct writing.

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REFERENCES

Abbas, J., Wang, D., Su, Z., & Ziapour, A. (2021). The Role of Social Media in the Advent of COVID-19 Pandemic: Crisis Management, Mental Health Challenges and Implications. *Risk Management and Healthcare Policy*, *Volume 14*, 1917–1932. https://doi.org/10.2147/RMHP.S284313

Abdi, A., Shamsuddin, S. M., Hasan, S., & Piran, J. (2019). Deep learning-based sentiment classification of evaluative text based on Multi-feature fusion. *Information Processing & Management*, *56*(4), 1245–1259. https://doi.org/10.1016/j.ipm.2019.02.018

Abdrakhmanova, M., Kuzdeuov, A., Jarju, S., Khassanov, Y., Lewis, M., & Varol, H. A. (2021). SpeakingFaces: A Large-Scale Multimodal Dataset of Voice Commands with Visual and Thermal Video Streams. *Sensors*, *21*(10), 3465. https://doi.org/10.3390/s21103465

Alnahdi, G. H. (2019). Rasch validation of the Arabic version of the Teacher Efficacy for Inclusive Practices (TEIP) scale. *Studies in Educational Evaluation*, *62*, 104–110. https://doi.org/10.1016/j.stueduc.2019.05.004

Althagafi, A., Althobaiti, G., Alhakami, H., & Alsubait, T. (2021). Arabic Tweets Sentiment Analysis about Online Learning during COVID-19 in Saudi Arabia. *International Journal of Advanced Computer Science and Applications*, *12*(3). https://doi.org/10.14569/IJACSA.2021.0120373

Ameliola, S., & Nugraha, H. D. (2015). Perkembangan Media Informasi dan Teknologi Terhadap Anak dalam Era Globalisasi. *Perkembangan Media Informasidan Teknologi Terhadap Perkembangan Anak*, *2*, 400.

American Diabetes Association. (2020). 13. Children and Adolescents: *Standards of Medical Care in Diabetes−2020. Diabetes Care*, *43*(Supplement_1), S163–S182. https://doi.org/10.2337/dc20-S013

Amin, T., & Badreddine, D. (2020). Teaching science in Arabic: Diglossia and discourse patterns in the elementary classroom. *International Journal of Science Education*, *42*(14), 2290–2330. https://doi.org/10.1080/09500693.2019.1629039

Anggraeny, F. T., Wahanani, H. E., Akbar, F. A., Raharjo, M. I. P., & Rizkyando, S. (2021). Peningkatan Ketrampilan Kreativitas Desain Grafis Digital Siswa SMU Menggunakan Aplikasi CANVA pada Ponsel Pintar. *Journal of Approriate Technology for Community Services*, *2*(2), 86–91. https://doi.org/10.20885/jattec.vol2.iss2.art5

Annisa, N. (2021). Pengembangan Media Pembelajaran Berbasis Website Pada Materi Sortasi Dan Grading. *Edufortech*, *6*(1). https://doi.org/10.17509/edufortech.v6i1.33290

Antony-Newman, M. (2019). Parental involvement of immigrant parents: A meta-synthesis. *Educational Review*, *71*(3), 362–381. https://doi.org/10.1080/00131911.2017.1423278

Aubrey, S., King, J., & Almukhaild, H. (2022). Language Learner Engagement During Speaking Tasks: A Longitudinal Study. *RELC Journal*, *53*(3), 519–533. https://doi.org/10.1177/0033688220945418

Bondy, B., Klages, U., Müller-Spahn, F., & Hock, C. (1994). Cytosolic free [Ca2+] in mononuclear blood cells from demented patients and healthy controls. *European Archives of Psychiatry and Clinical Neuroscience*, *243*(5), 224–228. https://doi.org/10.1007/BF02191578

Botero, U. J., Wilson, R., Lu, H., Rahman, M. T., Mallaiyan, M. A., Ganji, F., Asadizanjani, N., Tehranipoor, M. M., Woodard, D. L., & Forte, D. (2021). Hardware Trust and Assurance through Reverse Engineering: A Tutorial and Outlook from Image Analysis and Machine Learning Perspectives. *ACM Journal on Emerging Technologies in Computing Systems*, *17*(4), 1–53. https://doi.org/10.1145/3464959

Brosh, H. Y. (2019). Arabic language-learning strategy preferences among undergraduate students. *Studies in Second Language Learning and Teaching*, *9*(2), 351–377. https://doi.org/10.14746/ssllt.2019.9.2.5

Bruggeman, B., Tondeur, J., Struyven, K., Pynoo, B., Garone, A., & Vanslambrouck, S. (2021). Experts speaking: Crucial teacher attributes for implementing blended learning in higher education. *The Internet and Higher Education*, *48*, 100772. https://doi.org/10.1016/j.iheduc.2020.100772

Chekroud, A. M., Bondar, J., Delgadillo, J., Doherty, G., Wasil, A., Fokkema, M., Cohen, Z., Belgrave, D., DeRubeis, R., Iniesta, R., Dwyer, D., & Choi, K. (2021). The promise of machine learning in predicting treatment outcomes in psychiatry. *World Psychiatry*, *20*(2), 154–170. https://doi.org/10.1002/wps.20882

Chengaiyan, S., Retnapandian, A. S., & Anandan, K. (2020). Identification of vowels in consonant–vowel–consonant words from speech imagery based EEG signals. *Cognitive Neurodynamics*, *14*(1), 1–19. https://doi.org/10.1007/s11571-019-09558-5

Dahou, A., Elaziz, M. A., Zhou, J., & Xiong, S. (2019). Arabic Sentiment Classification Using Convolutional Neural Network and Differential Evolution Algorithm. *Computational Intelligence and Neuroscience*, *2019*, 1–16. https://doi.org/10.1155/2019/2537689

Deiri, Y. (2023). Teaching Arabic to children and youth in the United States: Between love and indictment. *International Journal of Bilingual Education and Bilingualism*, *26*(7), 817–829. https://doi.org/10.1080/13670050.2021.1989372

Dwijayani, N. M. (2019). Development of circle learning media to improve student learning outcomes. *Journal of Physics: Conference Series*, *1321*(2), 171–187. https://doi.org/10.1088/1742-6596/1321/2/022099

Ferjan Ramírez, N., Lytle, S. R., & Kuhl, P. K. (2020). Parent coaching increases conversational turns and advances infant language development. *Proceedings of the National Academy of Sciences*, *117*(7), 3484–3491. https://doi.org/10.1073/pnas.1921653117

Ghani, N. A., Hamid, S., Targio Hashem, I. A., & Ahmed, E. (2019). Social media big data analytics: A survey. *Computers in Human Behavior*, *101*, 417–428. https://doi.org/10.1016/j.chb.2018.08.039

Giordano, P. C., Copp, J. E., Manning, W. D., & Longmore, M. A. (2019). Linking parental incarceration and family dynamics associated with intergenerational transmission: A life-course perspective*. *Criminology*, *57*(3), 395–423. https://doi.org/10.1111/1745-9125.12209

Hadi, I. P. (2010). Perkembangan Teknologi Komunikasi Dalam Era Jurnalistik Modern. *Scriptura*, *3*(1), 69–84. https://doi.org/10.9744/scriptura.3.1.69-84

Hapsari, Gita Permata Puspita., & Z. (2021). Analysis Of The Needs of Animated Video Media Based on The Canva Application in Science. *Pancasakti Science Education Journal*, *6*(1), 22–29. https://doi.org/10.24905/psej.v6i1.43

Hwangbo, J., Lee, J., Dosovitskiy, A., Bellicoso, D., Tsounis, V., Koltun, V., & Hutter, M. (2019). Learning agile and dynamic motor skills for legged robots. *Science Robotics*, *4*(26), eaau5872. https://doi.org/10.1126/scirobotics.aau5872

Karlsson, A., Nygård Larsson, P., & Jakobsson, A. (2020). The continuity of learning in a translanguaging science classroom. *Cultural Studies of Science Education*, *15*(1), 1–25. https://doi.org/10.1007/s11422-019-09933-y

Lalmuanawma, S., Hussain, J., & Chhakchhuak, L. (2020). Applications of machine learning and artificial intelligence for Covid-19 (SARS-CoV-2) pandemic: A

review. *Chaos, Solitons & Fractals*, *139*, 110059. https://doi.org/10.1016/j.chaos.2020.110059

Levine, D., Pace, A., Luo, R., Hirsh-Pasek, K., Michnick Golinkoff, R., De Villiers, J., Iglesias, A., & Sweig Wilson, M. (2020). Evaluating socioeconomic gaps in preschoolers' vocabulary, syntax and language process skills with the Quick Interactive Language Screener (QUILS). *Early Childhood Research Quarterly*, *50*, 114–128. https://doi.org/10.1016/j.ecresq.2018.11.006

Li, C., Wang, J., Wang, Y., Gao, H., Wei, G., Huang, Y., Yu, H., Gan, Y., Wang, Y., Mei, L., Chen, H., Hu, H., Zhang, Z., & Jin, Y. (2019). Recent progress in drug delivery. *Acta Pharmaceutica Sinica B*, *9*(6), 1145–1162. https://doi.org/10.1016/j.apsb.2019.08.003

Li, Z., Shen, H., Cheng, Q., Liu, Y., You, S., & He, Z. (2019). Deep learning based cloud detection for medium and high resolution remote sensing images of different sensors. *ISPRS Journal of Photogrammetry and Remote Sensing*, *150*, 197–212. https://doi.org/10.1016/j.isprsjprs.2019.02.017

Paico Campos, M. M., Ramos-Cosi, S., & Andrade-Arenas, L. (2023). SAFE Mobile Application: Prevention of Violence Against Women. *International Journal of Engineering Trends and Technology*, *71*(12), 299–307. https://doi.org/10.14445/22315381/IJETT-V71I12P228

Pinquart, M., & Ebeling, M. (2020). Parental Educational Expectations and Academic Achievement in Children and Adolescents—A Meta-analysis. *Educational Psychology Review*, *32*(2), 463–480. https://doi.org/10.1007/s10648-019-09506-z

Rashwan, H. (2023). Intellectual Decolonization and Harmful Nativism: Arabic Knowledge Production of Ancient Egyptian Literature. *Interventions*, 1–38. https://doi.org/10.1080/1369801X.2022.2161054

Rasyid, H. Al. (2017). Pengaruh Kualitas Layanan Dan Pemanfaatan Teknologi Terhadap Kepuasan Dan Loyalitas Pelanggan Go-Jek. *Jurnal Ecodemica: Jurnal Ekonomi, Manajemen, dan Bisnis*, *1*(2), 210–223. https://doi.org/10.31311/jeco.v1i2.2026

Ribeiro, L. M., Cunha, R. S., Silva, M. C. A. E., Carvalho, M., & Vital, M. L. (2021). Parental Involvement during Pandemic Times: Challenges and Opportunities. *Education Sciences*, *11*(6), 302. https://doi.org/10.3390/educsci11060302

Ritonga, M., Asrina, A., Widayanti, R., Alrasi, F., Julhadi, J., & Halim, S. (2020). Analysis of Arabic Language Learning at Higher Education Institutions with Multi-Religion Students. *Universal Journal of Educational Research*, *8*(9), 4333–4339. https://doi.org/10.13189/ujer.2020.080960

Rosowsky, A. (2019). Sacred language acquisition in superdiverse contexts. *Linguistics and Education*, *53*, 100751. https://doi.org/10.1016/j.linged.2019.100751

Saada, N., & Gross, Z. (2019). The experiences of Arab teachers in Jewish schools in Israel. *Teaching and Teacher Education*, *79*, 198–207. https://doi.org/10.1016/j.tate.2018.11.012

Serevina, V., & Hamidah, I. (2022). Science, Technology, Engineering, and Math (STEM) based Geothermal Energy Source Digital Module Assisted by Canva Application. *Journal of Physics: Conference Series*, *2377*(1), 012063. https://doi.org/10.1088/1742-6596/2377/1/012063

Sharif Matthews, J., & López, F. (2019). Speaking their language: The role of cultural content integration and heritage language for academic achievement among

Latino children. *Contemporary Educational Psychology*, *57*, 72–86. https://doi.org/10.1016/j.cedpsych.2018.01.005

Szczepek Reed, B., Said, F., Davies, I., & Bengsch, G. (2020). Arabic complementary schools in England: Language and Fundamental British Values. *Language, Culture and Curriculum*, *33*(1), 50–65. https://doi.org/10.1080/07908318.2019.1569674

Ting, D. S. W., Peng, L., Varadarajan, A. V., Keane, P. A., Burlina, P. M., Chiang, M. F., Schmetterer, L., Pasquale, L. R., Bressler, N. M., Webster, D. R., Abramoff, M., & Wong, T. Y. (2019). Deep learning in ophthalmology: The technical and clinical considerations. *Progress in Retinal and Eye Research*, *72*, 100759. https://doi.org/10.1016/j.preteyeres.2019.04.003

Tlili, A., Huang, R., Shehata, B., Liu, D., Zhao, J., Metwally, A. H. S., Wang, H., Denden, M., Bozkurt, A., Lee, L.-H., Beyoglu, D., Altinay, F., Sharma, R. C., Altinay, Z., Li, Z., Liu, J., Ahmad, F., Hu, Y., Salha, S., … Burgos, D. (2022). Is Metaverse in education a blessing or a curse: A combined content and bibliometric analysis. *Smart Learning Environments*, *9*(1), 24. https://doi.org/10.1186/s40561-022-00205-x

Toivonen, T., Heikinheimo, V., Fink, C., Hausmann, A., Hiippala, T., Järv, O., Tenkanen, H., & Di Minin, E. (2019). Social media data for conservation science: A methodological overview. *Biological Conservation*, *233*, 298–315. https://doi.org/10.1016/j.biocon.2019.01.023

YiǦiT, A., & Işik, Z. (2020). Applying deep learning models to structural MRI for stage prediction of Alzheimer's disease. *TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES*, *28*(1), 196–210. https://doi.org/10.3906/elk-1904-172

Yoon, Y., Cha, B., Lee, J.-H., Jang, M., Lee, J., Kim, J., & Lee, G. (2020). Speech gesture generation from the trimodal context of text, audio, and speaker identity. *ACM Transactions on Graphics*, *39*(6), 1–16. https://doi.org/10.1145/3414685.3417838

Zhang, W., Liu, Y., & Guo, Z. (2019). Approaching high-performance potassium-ion batteries via advanced design strategies and engineering. *Science Advances*, *5*(5), eaav7412. https://doi.org/10.1126/sciadv.aav7412

Zhu, L., Gao, M., Peh, C. K. N., & Ho, G. W. (2019). Recent progress in solar-driven interfacial water evaporation: Advanced designs and applications. *Nano Energy*, *57*, 507–518. https://doi.org/10.1016/j.nanoen.2018.12.046

Züst, M. A., Ruch, S., Wiest, R., & Henke, K. (2019). Implicit Vocabulary Learning during Sleep Is Bound to Slow-Wave Peaks. *Current Biology*, *29*(4), 541-553.e7. https://doi.org/10.1016/j.cub.2018.12.038