12-31-2019

Teaching Arabic in the era of Industrial Revolution 4.0 in Indonesia: Challenges and opportunities

Azkia Muharom Albantani  
*Faculty of Educational Sciences, Syarif Hidayatullah State Islamic University Jakarta, Indonesia,*  
azki@uinjkt.ac.id

Ahmad Madkur  
*Faculty of Tarbiya and Teaching Science, State Institute for Islamic Studies Metro Lampung, Indonesia,*  
amdzkurahmad@gmail.com

Follow this and additional works at: [https://scholarhub.ui.ac.id/ajce](https://scholarhub.ui.ac.id/ajce)

Part of the Education Commons

**Recommended Citation**  
Albantani, Azkia Muharom and Madkur, Ahmad (2019). Teaching Arabic in the era of Industrial Revolution 4.0 in Indonesia: Challenges and opportunities. *ASEAN Journal of Community Engagement, 3*(2). Available at: [https://doi.org/10.7454/ajce.v3i2.1063](https://doi.org/10.7454/ajce.v3i2.1063)

Creative Commons License  
This work is licensed under a [Creative Commons Attribution-Share Alike 4.0 License](https://creativecommons.org/licenses/by-sa/4.0/). This Review Article is brought to you for free and open access by the Universitas Indonesia at UI Scholars Hub. It has been accepted for inclusion in ASEAN Journal of Community Engagement by an authorized editor of UI Scholars Hub.
Teaching Arabic in the era of Industrial Revolution 4.0 in Indonesia: Challenges and opportunities

Azkia Muharom Albantani\textsuperscript{a}, Ahmad Madkur\textsuperscript{b}

\textsuperscript{a}Faculty of Educational Sciences, Syarif Hidayatullah State Islamic University Jakarta, Indonesia
\textsuperscript{b}Faculty of Tarbiya and Teaching Science, State Institute for Islamic Studies Metro Lampung, Indonesia

Received: July 29\textsuperscript{th}, 2019 || Revised: August 1\textsuperscript{st} & December 4\textsuperscript{th}, 2019 || Accepted: December 13\textsuperscript{th}, 2019

Abstract

Teaching Arabic as a foreign language (TAFL) in Indonesia has been of interest to many scholars, but studies on TAFL in the context of industrial revolution (IR) 4.0 have been rarely conducted. This qualitative study was aimed at investigating the challenges and opportunities in accelerating the quality of Arabic language instruction in the IR 4.0 era. Qualitative data analysis consisting of four steps, namely, data collection, data reduction, data presentation, and data verification was applied to analyze the gathered data. According to the research results, the challenges are the following: Arabic language teachers’ limited adaptation to technology, students’ low motivation to learn, and uncertainty of policies on TAFL practices. The opportunities to effectively establish Arabic teaching and learning are government support, demands on Arabic language skills in modern workplaces, and availability of interactive multimedia.

Keywords: Teaching Arabic, foreign language, Arabic learning, industrial revolution 4.0, challenges, opportunities

1. Introduction

The industrial revolution (IR) 4.0 has not only changed the economic world but also transformed the education sector into a 4.0 version (Schwab, 2017; Shahroom & Hussin, 2018). The changes generated from IR4.0 not only provide opportunities but also pose challenges. This period, according to Xing & Marwala (2017), obliges special competencies that are not exactly the same as the skills required in the third industrial revolution where information technology (IT) was the key driver.

At present, all stakeholders in the educational fields must pay close attention to the urgency of IR4.0 in all subjects, including Arabic language. Although not as prevalent as English, Arabic is the world’s fifth most widely spoken language with 422 million speakers and has undergone significant developments not only in the Arab region but also in non-Arab countries (Jaafar, 2018). According to Al-Huri (2015), Arabic is one of the United Nations’ six authorized languages, together with Chinese, Russian, English,
French, and Spanish since 1974. Arabic has become a scientific and academic language, as well as a popular language in the international community. Thus, using Arabic to convey scientific truths is important (Bulkisah, 2017). The potential for the development and uses of the Arabic language in various fields of life (social, economic, business, tourism, politics, culture, and others) remains large and wide open. As a consequence, the quality of Arabic language teaching needs greater improvement so that Arabic language learners can be professionally competitive in the current industrialized era (Arifin, 2018).

In Indonesia, the country with the world’s largest Muslim population, Arabic is one of the most essentially used foreign languages, such as English, Chinese, Japanese, Korean, German, Dutch, and French (Budiman, 2015). Due to its paramount importance as the language of the Holy Qur’an (Morrow & Castleton, 2007) and of Islamic rituals (Wekke, 2015), Arabic is well-accepted in Indonesian society and is taught in state and private schools and universities, particularly those affiliated with Islamic educational institutions. In Islamic universities in Indonesia, the Arabic language course is administered not only to students majoring in this language but also to those enrolled in non-Arabic departments.

Arabic teaching in Indonesia still faces numerous problems and challenges. As Ridlo (2015) states, developing the potential of this language, especially through education, is a complex task because Arabic is perceived as a difficult language to learn. Furthermore, Arabic language teaching practices remain teacher-centered and based mainly on textbooks (Taha-Thomure, 2008); these trends still occur in Indonesia.

Issues on how foreign language teaching faces IR4.0 have been addressed in previous studies. Some foreign language practitioners have studied topics related to English (Afrianto, 2018; Angelianawati, 2019), the use of social media in English language teaching (Anggraeni, 2018), and the utilization of mobile applications to support language teaching (Halimah, Ibrahim, & Lustyantie, 2018). However, compared with the studies on the teaching of other foreign languages in IR4.0, particularly English, those on the Arabic language are fewer. Among them is a study conducted by Taufiqurrochman (2019) who found that Arabic electronic dictionaries are beneficial for supporting present-day language instruction and, therefore, a lexicology course needs to be developed by instilling teaching materials that examine electronic dictionaries. Overall,
the current study aims to comprehensively address the challenges and opportunities of promoting IR4.0 in the field of Arabic language teaching.

2. Methods

This study was qualitative in nature. Qualitative research does not apply statistical procedures or other methods of measurement related to the process of data quantification (Strauss and Corbin cited in Cresswell, 1998). Learning a specific paradigm calls for in-depth observation, including straightforwardly intermingling, analyzing, and comparing the results of previous studies, and finally drawing conclusions based on facts. The data sources in term of books and previous studies relating the foreign language teaching trends in IR4.0 were elaborated qualitatively. After the data were collected, they were analyzed through qualitative data analysis consisting of four consecutive steps, namely, data collection, data reduction, data presentation, and data verification (Miles & Huberman, 1994).

![Qualitative Data Analysis Model](Miles & Huberman, 1994)

3. Result and Discussion

This section not only discusses the challenges and opportunities in teaching Arabic in the IR 4.0 era, but also examines the role of professional organization in the development of Arabic teachers’ competence.
3.1. Challenges

No study has confirmed when Arabic in Indonesia started to develop. However, the strongest assumption is that teaching Arabic as a foreign language in the country is parallel to Indonesia’s encounter with Islam in the 7th century (Hanani, 2018). Thus, the use of the Arabic language in Indonesia preceded that of other foreign languages in the country. Despite such a long history, Arabic language teaching in Indonesia still faces crucial challenges, especially in the IR4.0 era.

3.1.1 Teachers’ Lack of Adaptability to Technology

Integrating technology into foreign language instruction in the digital era is unquestionably vital and scientifically suggested. However, as Decoito & Richardson (2018) argued, technology may not be effectual in the classroom without the active role of teachers who are well-informed about the technology itself and its execution to reach their educational goals. This condition means that the benefits of adapting to technological advancement is foreseeable for teachers. Unfortunately, many Arabic language teachers in Indonesia’s Islamic educational institutions have a great impression of the importance of teaching grammar (nahwu) only through memorization of the language rules, leaving aside the significance of methods that can be learned efficiently and proficiently by involving technological devices and science (Albantani & Madkur, 2017). Realistically, Arabic language teachers face the major challenge of being well-prepared to deal with their digital-savvy students (Jouejati, 2011).

The lack of teachers’ adaptation to technology is due to factors that are not always negative but also positive. One reason is that more than half of the teachers equipped with computers only use them for administrative functions. Another is that many teachers lack effective training, time and competency in operating the technological tools (Ghavifekr, Kunjappan, Ramasamy, & Anthony, 2016). Some teachers, according to Skenderi & Skender (2017), also believe that technology has no positive contribution to the development of communication skills among young people because it can make them less sociable.

Thus, schools must investigate the impact of technology integration on students’ achievement and attitude (Robinson, 2016). The teachers from digital native generations should be taught how their acquired skills can be used to incorporate
technology into the classroom curriculum to offer complex cognitive appointment for their students (Mundy, Kupczynski, & Kee, 2012). The institution should also upgrade teachers’ technology integration skills by organizing relevant workshops (Almekhlafi & Almeqdadi, 2010). Suwandi (2018) highlights that learning at present must refer to the four learning characteristics of the 21st century, namely, critical thinking and problem solving, creativity and innovation, collaboration, and communication. These conditions necessitate teachers who are open, adaptive, and accommodating to the various needs of students in terms of providing teaching materials, using learning models and assessment techniques, and creating a challenging learning atmosphere.

3.1.2 **Low Motivation of Arabic Language Learners**

Low interest and motivation in learning is one of the major challenges in developing Arabic language education in Indonesia. According to Wahab (2008), the difficulties in learning Arabic are mainly due to psychological, educative, and social factors. The students’ lack of motivation to learn may be due to their age and the teachers’ role (Ghenghesh, 2010). Islam (2015) classified the influencing factors into external and internal. External factors include learning materials, complexity of the language, and learning facility and environment, while internal factors include basic competence, prior learning experience, and negative perception toward the Arabic subject. The effect of prior learning experience on Arabic learning can be observed from the fact that students who graduated from non-Islamic schools tend to experience greater difficulties in learning Arabic than students from Islamic ones (Chandra, Yusuf, & Jaya, 2017).

In the Indonesian context, the students learning Arabic seem less motivated than those who are learning other foreign languages, particularly English. However, motivation types are relatively similar for both groups of students. A study by Nailufar (2018) on an Acehnese Islamic university concluded that English and Arabic majors have similarities in terms of motivation, which drives them to learn their chosen target language. Students of both majors were predominantly driven by integrative rather than instrumental motivation.

This phenomenon deserves considerable attention from education stakeholders because it affects the development of Arabic language teaching in the IR4.0 era. The reason is that motivation for learning Arabic language, as elaborated by Wekke &
Suhendar (2016), is the primary means to sustain the process of teaching this language in Indonesia.

3.1.3 Uncertainty of Educational Policy in Arabic Language Teaching

Educational policy plays a pivotal role in Arabic language instruction. The existence of an Arabic language learning program and its development in a school reflects how the educational institution leads this program toward an effective direction. A quality learning program, according to Tilaar & Nugroho (2012), necessitates a policy where the learning objectives expected by stakeholders of educational institutions can be achieved.

Unfortunately, according to Ridlo (2015), education policy and Arabic language teaching at madrasas and other educational institutions have been erratic so far. This uncertainty can be observed in several aspects. First, confusion occurs between learning Arabic as a goal (mastering language skills) and as a tool to master the knowledge that has been acquired by others who use the language (such as studying tafsir, fiqh, and hadith). The second type of uncertainty is in terms of the variety of Arabic learned, whether classical (fusha turâts), modern/contemporary (fushamu’âshirah), or market (‘âmmiyyah). Third, in terms of methods, uncertainty occurs between following the current development and maintaining the old-fashioned method. In this case, the Arabic language is widely taught by using qawāid wa tarjamah, a method equivalent to grammar translation. As explained by Musgamy (2015), this method emphasizes the aspects of reading and translating coupled with an analysis of the structure of the grammar contained in the text.

With regard to the policy on Arabic language learning, imbalance occurs in the guidance of Arabic learning at Islamic educational institutions (Kuraedah, Insawan, & Wahyuni, 2018). For instance, inequality is observed in the regulations on the development of Arabic studies, implementation of the development of fields of study in the Arabic language by supervisors of madrasahs, inadequately supportive policies of madrasahs, and Arabic teachers’ resoluteness in directing and upgrading Arabic language competence.
3.2. Opportunities

Despite the barriers, Arabic language teaching in Indonesia shows potential for development. The following are the opportunities in which Arabic language teaching stakeholders can participate, especially to address the inevitable IR4.0 era.

3.2.1 Government Support for the Use of Technology in Education

The Indonesian government realizes that the country's development requires accelerating the quality of education by encouraging all stakeholders to benefit from information and communication technology (ICT). This objective is officially highlighted in the Ministry of Education and Culture’s Regulation No. 65 of 2013, which states that every teacher must employ ICT in an integrated, systematic, and effective way for students. Ayu (2017) reported that the Indonesian government also supports the growth of social innovation among young Indonesians to face IR4.0.

In this regard, Wekke & Tamalia (2016) suggested the significance of taking the technological benefits in everyday life to be adapted as a part of the development of Arabic language teaching and learning. This issue is also comprehensively addressed by (Haque, 2017), who explains how technology can be integrated into the teaching of four basic skills in the Arabic language. In other words, the emergence of cutting-edge technology can be employed as learning media in Arabic language instruction.

3.2.2 Arabic Language Skills in Modern Workplaces

In this free-market era, people can easily have access to jobs in every part of the world, which implies the possibility of becoming Arabic language teachers in other countries. The Arabic language is learned by students in Arab and non-Arab countries. In the United States, for example, Arabic-speaking parents recognize a wide variety of benefits of Arabic language lessons for their children (Alili & Hassan, 2017). This condition implies that Indonesian students mastering Arabic skills have greater opportunities to work not only in their home country but also overseas.

The number of international students interested in learning Arabic has undergone a remarkable growth (Dajani, 2006). In terms of the reasons why more students learn Arabic language, Husseinali (2006) revealed that learners of Arabic as a foreign
language have some purposes, such as learning religion, travelling, seeking for a job, and cultural identity.

Another possible career is being an international translator. At Wolfestone, a globally popular translation services company, the most in-demand languages are German, French, Arabic, Spanish, and Mandarin Chinese, with Arabic and Mandarin experiencing the greatest growth (Jolin, 2014). Arabic language competence is expected to undergo an upward trend in international jobs. Moreover, due to the fast-growing expansion of businesses and increasingly globalized companies, Arabic ranked second among seven best languages to learn in 2018 (Phillpott, 2018).

3.2.3 Availability of Interactive Multimedia as an Alternative Learning Process

Interactive multimedia is a new technology with enormous potential to change ways of learning, obtaining information, and entertaining by involving user as control and combining various types of interactive media such as audio, video, text, and images. Multimedia taxonomy is at four levels, namely, (1) least interaction; (2) middle-level interactions; (3) a system that combines computers and video discs; (4) use of visual, audio, and other sources (Azzuhri, 2009). Teachers are advised to develop an Arabic learning system by using interactive multimedia so that students can learn easily and pleasantly (Rukimin & Koderi, 2015). Furthermore, multimedia can cultivate the learners’ interest (Shyamlee, 2012).

One of the easiest ways to create interactive multimedia in Arabic language teaching is by utilizing social media applications, such as Busuu, which has become popularly used for independent foreign language learning. The Busuu application enables students to learn Arabic in a comfortable and enjoyable manner. The application also provides convenience in independent communicative Arabic learning (Albantani, 2018). Another interactive platform that may be used is Google Classroom to intensify interactive communication with students outside official study hours. This application also provides flexibility to teachers in granting student access to scientific references related to courses that may not be obtained during face-to-face meetings (Rozak & Albantani, 2018).
3.3. Role of Professional Organization in the Development of Arabic Teachers’ Competence

The professional organization that fosters and develops the competence of Arabic language teachers is *Ittihad Mudarris al-Lughah al-‘Arabiyyah* (IMLA). This organization has participated in developing the Arabic language in Indonesia by encouraging government policy.

IMLA was established on September 25, 1999 at Air Panas Alam Sanggoriti, Dau, Malang. The launch was attended by 120 delegates from 46 universities. IMLA is founded on the pillars of professionalism, scientific inquiry, and *ukhuwah* (brotherhood). The goals of IMLA are to 1) develop professionalism, scholarship, and brotherhood among teachers of Arabic language and literature; 2) foster and develop Arabic linguistics, literature, and culture at the theoretical and practical levels for the advancement of knowledge and improvement of the quality of human resources in Indonesia; and 3) increase public interest in Arabic language and literature as part of efforts to cultivate intellectual life.

IMLA’s vision is “to be organization of professional Arabic language teachers in Indonesia, coexisting and internationally, which realizes a systematic understanding of the development of language and education Arabic, leaning on the integration of knowledge to achieve the ideals of development of human character and civilization sustainable in Indonesia, the Islamic world and the international world. IMLA is designed to be a professional organization which synergizes with all parties concerned in rebuilding and developing the characteristics, capacities and living standards of Arabic language lecturers/teachers, in the context of the unity of Indonesian-Islamic culture” (*Tim Penyusun*, 2019).

IMLA’s missions are to initiate and mobilize efforts to develop the Arabic language system, participate in the increasing role of Arabic language and education in the development of the character and culture of Indonesia, and consistently build, develop, and improve the competencies of Arabic language teachers in the framework of the development of Indonesia’s Islamic character and culture to achieve the growth of civilization and sustainability in Indonesia, the Muslim world, and the international community. Main Roles and Functions of IMLA such as:
a. Professional organizations: conduct, coordinate, and maintain research, development, and training efforts related to all components of the Arabic language system and education in Indonesia and abroad.

b. Cooperation forum: synergize and coordinate the efforts of the Arabic language development parties, as well as education in Indonesian and Islamic culture, in the framework of sustainable development in Indonesia and abroad.

c. Advocacy group: carrying out the socialization, promotion, and defense of Arabic and educational issues, and addressing issues concerning lecturers/teachers, in accordance with the development of the character, culture, and civilization that are sustainable in Indonesia and abroad.

d. Information and communication network, including providing a wide range of data and information on the state of the Arabic language and education system, and the conditions of teachers/lecturers, as well as the efforts that have been conducted to facilitate the achievement of ideals and sustainable civilization development in Indonesia and abroad.

From the IMLA profile, several features that can improve the competence of Arabic language teachers are the following: 1) openness of IMLA to teachers and lecturers of Arabic in Indonesia; 2) advocacy toward the protection of Arabic language and education in Indonesia; 3) serving as a forum for Arabic teachers and lecturers to develop their competencies in learning, research, and community service; 4) serving as a national network with 24 regional and branch administrators in Indonesia. South Kalimantan has an official board on April 23, 2015. Furthermore, IMLA is recognized as a member of the World Arabic Language Organization headquartered in Riyadh, Saudi Arabia; and 5) IMLA organizes fifth-year conferences and international scientific meetings. All teachers and lecturers of Arabic in Indonesia and around the world are welcomed to participate.

Arabic teacher are advised to actively participate in professional organizations so that their competencies can continue to increase along with their motivation and pride in their profession (Muradi, 2016).

Sa’fan and Mahmud (2005) noted that the following four demands must be immediately addressed to assist professional teachers of Arabic: 1) demand for
technological change, 2) demand for value changes that develop in society, 3) demand for social and economic change, and 4) demand for educational change.

Extensive insights and information can be obtained by teachers who participate in various activities that can improve their competencies. For example, they can take a part in such events as seminars, workshops, and trainings organized by the organization profession. The other plus point the cultural competence. IMLA can connect us with the teachers both teachers and lecturers from outside the country, especially on the Arabian Peninsula. Through IMLA, all members of the profession will have the opportunity to be invited to exchange information regarding the Arabic language and culture.

4. Conclusion

The Arabic language cannot be considered as marginalized compared with other foreign languages in the IR4.0 era. Thus, an innovative, creative, age-appropriate, enjoyable, and competitive Arabic learning process is necessary, with professional language instructors, methodologies, and learning media in accordance with global standards.

Thus, policies, high commitment, and visionary perspectives on the management of educational institutions and supporting the Arabic language are oriented toward developing human resources in accordance with the development of science and technology. Commitments based on technology are expensive, but this assumption is not always true. Physical development sometimes becomes more expensive because it requires high maintenance costs. Physically oriented development in higher education institutions is usually based on classic reasons such as limitations in the implementation of conventional classroom learning. Conventional face-to-face learning in the future will be increasingly replaced by decentralized learning through interactive CDs, web bases, and other IT devices. In addition, it is also necessary to develop or use IT-based teaching media or taking benefits from up-to-date software and hardware for Arabic language learning.

Acknowledgments

Our biggest appreciation goes to Syarif Hidayatullah State Islamic University (UIN) Jakarta, for supporting this research, especially Faculty of Educational Sciences UIN
Jakarta that already permitted us to conduct this research outside UIN Jakarta. We also thank madrasah (State Islamic Schools) in Tangerang Selatan for welcoming us and sharing data as the documentation data of this research. Finally, we also appreciate the support of IMLA (Arabic Teacher and Lecturer Association of Indonesia) as the professional organization that fosters and develops the competence of Arabic language teachers, and Faculty of Tarbiya and Teaching Science State Institute for Islamic Studies (IAIN) Metro.

**Author Contribution**

Both authors worked together on the idea and the problem related to Teaching Arabic in the Era of Industrial Revolution 4.0 in Indonesia: Challenges and Opportunities. Azkia Muharom Albantani developed the theory and Ahmad Madkur verified the analytical methods. Both investigated and supervised the findings of this work. All authors discussed the results and contributed to the final manuscript.

**References**

Afrianto. (2018). Being a Professional Teacher in the Era of Industrial Revolution 4. 0: Opportunities , Challenges and Strategies for Innovative Classroom Practices. *English Language Teaching and Research, 2*(1), 1–13. http://ejournal.unp.ac.id/index.php/eltar/article/view/102675

Albantani, A. M. (2018). Optimization of Busuu Applications in Learning of Independent Arabic Language. *Arabic: Journal of Arabic Studies, 3*(1), 1–10. http://journal.imla.or.id/index.php/arabi/article/download/78/32

Albantani, A. M., & Madkur, A. (2017). Musyahadat Al Fidyu: Youtube-Based Teaching and Learning of Arabic As Foreign Language ( AFL ). *Dinamika Ilmu, 17*(2), 291–308. https://eric.ed.gov/?id=EJ1169438

Al-Huri, I. (2015). Arabic Language: Historic and Sociolinguistic Characteristics. *English Literature and Language Review, 1*(4), 28–36. https://doi.org/10.13140/RG.2.2.16163.66089/1

Alili, S. A., & Hassan, W. (2017). Attitudes of Arabic- and Non-Arabic Speaking Parents Toward the Importance of Learning Arabic in the United States. *Journal of the National Council of Less Commonly Taught Languages, 21*(1), 1–36.
Almekhlafi, A. G., & Almeqdadi, F. A. (2010). Teachers’ perceptions of technology integration in the United Arab Emirates school classrooms. *Educational Technology and Society*, 13(1), 165–175. https://www.jstor.org/stable/pdf/jeductechsoci.13.1.165.pdf

Angelianawati, L. (2019). Being an English teacher in Industrial Revolution 4.0: An Overview About Roles, Challenges, and Implications. *Jurnal Dinamika Pendidikan*, 11(3), 307–316. https://doi.org/10.33541/jdp.v11i3.896

Anggraeni, C. W. (2018). Promoting Education 4.0 in English for Survival Class: What are the Challenges? *Metathesis: Journal of English Language, Literature, and Teaching*, 2(1), 12–24. https://doi.org/10.31002/metathesis.v1i2.676

Arifin, A. Z. (2018). Eksistensi Bahasa Arab di Era Revolusi Industri 4.0. *Eksistensi Bahasa Arab Di Era Revolusi Industri 4.0*, 1–12. Makassar: Universitas Muhammadiyah Makassar.

Ayu, N. A. K. (2017). *Peluang Social Innovation dalam Revolusi Industri 4.0: Bagaimana Perkembangannya di Indonesia?* Yogyakarta: Forbil Institute.

Azzuhri, M. (2009). *Metode dan Media Pembelajaran Bahasa Arab Berbasis Internet di Era Teknologi Informasi* (Methods and Media for Learning Arabic on Internet-Based in the Information Technology Age). *INSANIA*, 14(3), 348–445. http://ejournal.iainpurwokerto.ac.id/index.php/insania/article/view/360

Budiman, M. (2015). Kecemasan Berbahasa Asing (Bahasa Arab). *Lensa: Kajian Kebahasaan, Kesusasteraan, Dan Budaya*, 5(2), 109–131. https://jurnal.unimus.ac.id/index.php/lensa/article/view/1785

Bulkisah, B. (2017). Pembelajaran Bahasa Arab Pada Perguruan Tinggi Agama Islam Di Indonesia. *Jurnal Ilmiah Didaktika*, 12(2), 308–318. https://doi.org/10.22373/jid.v12i2.455

Chandra, Y., Yusuf, A. M., & Jaya, Y. (2017). Motivasi Belajar Siswa Madrasah Aliyah dalam Mengikuti Mata Pelajaran Bahasa Arab dan Implikasinya dalam Layanan Bimbingan dan Konseling (Studi pada Siswa Madrasah Aliyah Negeri 1 Sungai Penuh yang Berasal dari Sekolah Menengah Pertama). *Konselor*, 5(2), 83. https://doi.org/10.24036/02016526544-0-00
Cresswell, J. (1998). *Research Design: Qualitative & Quantitative Approaches*. Thousand Oaks, CA: SAGE Publication.

Dajani, B. (2006). Arabic Language Learning and Motivation. *Multilingualism across Europe*, 1–22. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.443.4539&rep=rep1&type=pdf&page=77

Decoito, I., & Richardson, T. (2018). Teachers and Technology: Present Practice and Future Directions. *Contemporary Issues in Technology and Teacher Education*, 18(2), 362–378. https://www.learntechlib.org/primary/p/180395/

Ghavifekr, S., Kunjappan, T., Ramasamy, L., & Anthony, A. (2016). Teaching and Learning with ICT Tools: Issues and Challenges from Teachers’ Perceptions. *Malaysian Online Journal of Educational Technology*, 4(2), 38–57. https://eric.ed.gov/?id=EJ1096028

Ghenghesh, P. (2010). The Motivation of Learners of Arabic: Does it Decrease with Age? *Journal of Language Teaching and Research*, 1(3), 235–249. https://doi.org/10.4304/jltr.1.3.235-249

Halimah, Ibrahim, G. A., & Lustyantie, N. (2018). Cello as a Language Teaching Method in Industrial Revolution 4.0 Era. *English Review: Journal of English Education*, 7(1), 75–82. https://journal.uniku.ac.id/index.php/ERJEE/article/view/1497

Hanani, N. (2018). Prospek Pendidikan Bahasa Arab di Indonesia Pada Era Perkembangan Zaman. *Didaktika Religia*, 4(2), 23–38. https://doi.org/10.30762/didaktika.v4i2.p23-38.2016

Haque, M. Z. (2017). Method of Teaching The Four Skills of Arabic Language by Technology. *The International Conference on Arabic Studies and Islamic Civilization*, 1–13. Kuala Lumpur. https://www.academia.edu/download/54050446/Full_Paper.pdf

Husseinali, G. (2006). Who is studying Arabic and why? A survey of Arabic students’ orientations at a major university. *Foreign Language Annals*, 39(3), 395–412. https://doi.org/10.1111/j.1944-9720.2006.tb02896.x

Islam, A. M. S. (2015). Faktor Demotivasi Pembelajaran Bahasa Arab dalam Perspektif Siswa Madrasah. *Arabiyat: Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban*, 2(1), 1–16. http://dx.doi.org/10.15408/a.v2i1.1511
Jaafar, E. A. (2018). *Arabize, Arabization, and Arabic Language*. Baghdad. https://doi.org/10.13140/RG.2.2.20185.98409

Jolin, L. (2014). Why language skills are great for business. *The Guardian*. https://www.theguardian.com/small-business-network/2014/dec/16/language-skills-great-business

Jouejati, S. (2011). Integrating Technology into Arabic Classroom Engaging the iGeneration. *12th ISNA Education Forum*, 1–12. Chicago. http://www.isna.net/wp-content/uploads/2016/10/integrating_technology_in_the_arabic_classroom-isna.ed_2011.pdf

Kuraedah, S., Insawan, H., & Wahyuni, I. (2018). The Reality of Arabic Learning Guidance in Indonesian Islamic Senior High Schools. *IOP Conference Series: Earth and Environmental Science*, 175(1), 1–7. https://doi.org/10.1088/1755-1315/175/1/012153

Miles, M. B., & Huberman, A M. (1994). *Qualitative Data Analysis: A Sourcebook for New Methods (2nd ed.).* (2nd ed.). Tousands Oaks, CA: SAGE.

Morrow, J. A., & Castleton, B. (2007). The Impact of Globalization on the Arabic Language. *Intercultural Communication Studies, XVI*(2), 202–212. https://www.academia.edu/5955497/Intercultural_Communication_Studies_XVI_2_2007_The_Impact_of_Globalization_on_the_Arabic_Language

Mundy, M., Kupczynski, L., & Kee, R. (2012). Teacher’s Perceptions of Technology Use in the Schools. *SAGE Open, 1*, 1–8. https://doi.org/10.1177/2158244012440813

Muradi, A. (2016). Pengembangan Kompetensi Guru Bahasa Arab Melalui IMLA sebagai Organisasi Profesi. *Arabi: Journal of Arabic Studies, 1*(2), 1–10. http://dx.doi.org/10.24865/ajas.v1i2.2

Musgamy, A. (2015). Tariqah al-Qawaid Wa Al-Tarjamah. *Al-Daulah, 4*(2), 391–402. http://journal.uin-alauddin.ac.id/index.php/al_daulah/article/view/1490

Nailufar, Y. (2018). Analysis of Motivations to Study English and Arabic. *English Education Journal, 9*(2), 328–345. http://jurnal.unsyiah.ac.id/EEJ/article/view/11552

Phillpott, S. (2018). The 7 Best Languages to Learn in 2018. Retrieved May 2, 2019, from CareerAddict website: https://www.careeraddict.com/best-languages
Ridlo, U. (2015). Bahasa Arab dalam pusaran arus globalisasi: Antara pesismisme dan optimisme. *Ihya Al-‘Arabiyyah*, 1(2), 210–226. [http://jurnal.uinsu.ac.id/index.php/ihya/article/view/1528](http://jurnal.uinsu.ac.id/index.php/ihya/article/view/1528)

Robinson, K. (2016). The Effect of Technology Integration on High School Students ’Literacy Achievement. *Teaching English with Technology*, 16(3), 3–16. [https://eric.ed.gov/?id=EJ1135683](https://eric.ed.gov/?id=EJ1135683)

Rozak, A., & Albantani, A. M. (2018). Arabic Learning Design through Google Classroom. *Arabiyat: Journal of Arabic Language Education and Language*, 5(1), 83–102. [https://doi.org/10.15408/a.v5i1.7481](https://doi.org/10.15408/a.v5i1.7481)

Rukimin & Koderi. (2015). *MULTIMEDIA INTERAKTIF DALAM PEMBELAJARAN BAHASA ARAB* (Interactive Multimedia in Arabic Language Learning). *Teknodika*, 1–10. [http://jurnal.fkip.uns.ac.id/index.php/teknodika/article/view/8285](http://jurnal.fkip.uns.ac.id/index.php/teknodika/article/view/8285)

Sa’fan, M. A., & Mahmud, S. T. (2005). *Al-Mu’allim: I’daduhuh wa Makanatuhu wa Adwaruhu*. Kairo: Dar al-Kitab al-Hadits.

Schwab, K. (2017). *The Fourth Industrial Revolution*. Cologny/Geneva: World Economic Forum.

Shahroom, A. A., & Hussin, N. (2018). Industrial Revolution 4. 0 and Education. *International Journal of Academic Research in Business and Social Sciences*, 8(9), 314–319. [https://doi.org/10.6007/IJARBSS/v8-i9/4593](https://doi.org/10.6007/IJARBSS/v8-i9/4593)

Shyamlee, S. D. (2012). “ Use of Technology in English Language Teaching and Learning”: An Analysis. *International Conference on Language, Medias and Culture*, 33, 150–156. Singapore: IACSIT Press. [http://www.ipedr.com/vol33/030-ICLMC2012-L10042.pdf](http://www.ipedr.com/vol33/030-ICLMC2012-L10042.pdf)

Skenderi, L., & Skender, F. (2017). Teachers Perceptions of Technology Use in Schools. *14th International Conference “The Power of Knowledge,”* 1–5. [https://doi.org/10.26634/jsch.4.1.637](https://doi.org/10.26634/jsch.4.1.637)

Suwandi, S. (2018). Tantangan mewujudkan pembelajaran bahasa dan sastra indonesia yang efektif di era revolusi industri 4.0 1. *Kongres Bahasa Indonesia XI*, 1–20. [http://kbi.kemdikbud.go.id/kbi_back/file/dokumen_makalah/dokumen_makalah_1540468786.pdf](http://kbi.kemdikbud.go.id/kbi_back/file/dokumen_makalah/dokumen_makalah_1540468786.pdf)
Taha-Thomure, H. (2008). The status of Arabic language teaching today. *Education, Business and Society: Contemporary Middle Eastern Issues*, 1(3), 186–192. https://doi.org/10.1108/17537980810909805

Taufiqurrochman, R. (2019). The Use of Arabic Electronic Dictionaries in The Industrial Revolution Era 4.0. *EasyChair Preprint*, 753. https://easychair.org/publications/preprint/P6Jk

Tilaar, H. A. R., & Nugroho, R. (2012). *Kebijakan Pendidikan*. Yogyakarta: Pustaka Pelajar.

Tim Penyusun. (2019, October 12). *Visi dan Misi IMLA*. Retrieved from http://imla.or.id/visi/

Wahab, M. A. (2008). *Epistemologi dan Metodologi Pembelajaran Bahasa Arab*. (Jakarta: Lembaga Penelitian UIN Syarif Hidayatullah.

Wekke, I. S. (2015). Arabic Teaching and Learning: A Model from Indonesian Muslim Minority. *Procedia - Social and Behavioral Sciences*, 191, 286–290. https://doi.org/10.1016/j.sbspro.2015.04.236

Wekke, I. S., & Suhendar. (2016). Attitude and Learning Motivation on Arabic Learning in Muslim Minority of North Sulawesi. *The International Conference Arabic Language Education and Literature and Islamic Values between Expectation and Realization*, 56. https://doi.org/10.3929/ethz-b-000238666

Wekke, I. S., & Tamalia, G. (2016). Tantangan Pengembangan Pembelajaran Bahasa Arab Madrasah Masa Depan: Adaptasi dalam Teknologi Pendidikan. *Seminar Nasional The 21st Century Skills Guru Pada Jenjang Pendidikan Dasar*, 1–13. Jakarta. https://doi.org/10.13140/RG.2.2.11881.44649

Xing, B., & Marwala, T. (2017). Implications of the Fourth Industrial Age on Higher Education, *The Thinker*, 73, 10-15. http://www.thethinker.co.za/resources/73%20xing%20and%20marwala.pdf