Improving Student Literacy Skills in Research and Scientific Articles: Arabic Language Education Study Program Sunan Kalijaga State Islamic University (2015-2020)

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Abstract **:** Indonesian education is currently faced with low interest in literacy. The results of the latest study/research from The Program for International Student Assessment (PISA) in 2018, which was released on December 3 2019 by the Ministry of Education and Culture, stated that Indonesia was ranked 62nd out of 71 countries. This research aims to describe the efforts of the Arabic Language Education Study Program Sunan Kalijaga State Islamic University in improving students' literacy skills in research and scientific articles. This research is descriptive qualitative research. Data collection was carried out using observation and documentation methods. The data obtained will be analyzed using the Miles and Huberman model through three stages: data reduction, data display, then data conclusion drawing. The results of this research indicate that there are indeed many things that can be done, especially by educational institutions, to strive for improving the literacy skills of their students. This includes activities both inside and outside the classroom, such as providing guidance in learning, conducting training, organizing seminars, and, of course, facilitating, supporting, and motivating students to continue their creative work.

INTRODUCTION

The dynamics of current developments have demanded changes to the current educational paradigm, including teaching procedures in the classroom. Apart from being professional educators who are tasked with transforming, developing and disseminating knowledge, lecturers also have an obligation to help students develop all their potential.[1] One of the potentials that must be developed in students is the potential for literacy skills, which is very important to be succeed in their careers and stay competitive in the professional activities.[2]

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[1] Deden Sutrisna, "Meningkatkan Kemampuan Literasi Mahasiswa Menggunakan Google Classroom," *FON : Jurnal Pendidikan Bahasa Dan Sastra Indonesia* 13, no. 2 (2018): 69–78, https://doi.org/10.25134/fjpbsi.v13i2.1544.

[2] Evgeny Y. Malevanov, Svetlana Y. Novoselova, and Elena A. Pevtsova, "Technologies Didactic Content of the Higher School Students Intellectual Potential Development," *Journal of Sustainable Development* 8, no. 3 (May 28, 2015): p227, https://doi.org/10.5539/jsd.v8n3p227.

This is mandatory considering that the face of Indonesian education is currently faced with low interest in literacy. The results of the latest study/research from The Program for International Student Assessment (PISA) in 2018, which was released on 3 December 2019 by the Ministry of Education and Culture, stated that Indonesia's position was 62nd out of 71 countries.[3] In a recent article written by Muhammad Nurtanto, Moh Fawaid and Herminarto Sofyan said that Indonesia's education landscape has witnessed a notable transformation', necessitating significant concern. In this era of rapid global competition, various factors such as the fourth industrial revolution, Sustainable Development Goals, and 21st century educational paradigms need to be incorporated into the educational system to ensure its alignment with the pace of competition.[4]

Literacy in the narrow sense is the ability to read and write.[5] Meanwhile, literacy in the broadest sense is a person's ability to express their thoughts in the form of language, both orally and in writing.[6] Basically, literacy activities aim to acquire information skills, namely collecting, processing and communicating information. The ability to explore and find information is a skill that students need to master. Information finding skills are demonstrated through the ability to identify needed information, the ability to access and find information, the ability to evaluate information and use information effectively. Language proficiency in the realm of literacy encompasses four tiers: a basic level, which involves the ability to find and extract information; an intermediate level, which entails making simple references; a high level, where one can draw inferences and interpretations with textual evidence; and an advanced level, characterized by the capacity to synthesize ideas and information from multiple texts in order to offer reasoned explanations.[7] Literacy is fundamental for success in school and later life.Students who cannot read, write and communicate effectively are highly unlikely to access the challenging academic curriculum in school and are more likely to have poor educational outcomes across all subjects.[8]

The Indonesian government and education practitioners have actually paid special attention to the development of literacy skills even though it is not clearly stated in the 2013 curriculum. This can be seen in the core competencies and basic competencies which have described the development of students' literacy as one

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[3] OECD, "Chapter 3 of The Publication "PISA 2003 Assesment of Framework – Mathematics, Reading, Science and Problem Solving Knowledge and Skills," vol. 4, 2019.

[4] Muhammad Nurtanto, Moh Fawaid, and Herminarto Sofyan, "Problem Based Learning (PBL) in Industry 4.0: Improving Learning Quality through Character-Based Literacy Learning and Life Career Skill (LL-LCS)," *Journal of Physics: Conference Series* 1573, no. 1 (July 1, 2020): 012006, https://doi.org/10.1088/1742-6596/1573/1/012006.

[5] Ariesman Setyarum and Erwan Kustriyono, "Menumbuhkan Gerakan Literasi Mahasiswa Dengan Metode Batik (Baca, Tulis, Karya) Di Universitas Pekalongan," *Jurnal Parafrasa: Bahasa, Sastra, Dan Pengajaran* 2, no. 1 (2021): 5–24.

[6] Esti Swatika Sari and Setyawan Pujiono, "Budaya Literasi Di Kalangan Mahasiswa FBS UNY," *LITERA* 16, no. 1 (2017): 105–13.

[7] Abdujabborova Kamola Husniddin Qizi, "Improving Literacy Skills Through Learning Reading," *Наука и Образование Сегодня*, no. 4 (63) (2021): 85–86.

[8] Alex Quigley and Robbie Coleman, "Improving Literacy in Secondary Schools. Guidance Report.," *Education Endowment Foundation*, 2019, https://eric.ed.gov/?id=ED612217.

of the goals of national education. Higher education has so far developed following government attention and global demands in preparing students to become people who are ready to compete in everything. In the context of education, universities also become a medium where students learn various things. To obtain competitive graduate results, universities also have benchmarks for study success for their students, one of which is publications produced by students.[9]

Scientific publications in the world of education have a very important role in developing and disseminating information on a topic. Since the issuance of Dikti Circular No. 152/E/T/2012 concerning Scientific Publications for Undergraduate/S2/S3, lecturers and students are more serious about publishing scientific papers.[10] This circular letter is a form of government attention to increasing scientific publications that must be carried out by universities. Student literacy in the publication of research results and scientific articles is an indicator of learning success. The low level of student literacy can be illustrated by the lack of written work produced. In compiling written work, whether research results or quality scientific articles, students must think critically through stages, make plans, interpret, analyze, and come to conclusions.[11]

Jia Li, Amareen Brar, and Novera Roihan said that in the current technological era, society has widely used digital technology. In fact, almost everyone has a smartphone. This has great potential for developing much-needed innovative teaching strategies to support communities to overcome persistent barriers to their language and literacy learning.[12] With the arrival of the digital age, information sources and common knowledge have shifted to digital formats, leading to a substantial increase in their abundance. Proficiency in creating and sharing content within the digital realm is now regarded as a crucial skill for information professionals in the 21st century. Siriwatchana Kaeophanuek, Jaitip Na-Songkhla, and Prachyanun Nilsook stated that the fact that happened was that students still had difficulty and failed to understand how to use this technology in the learning process, they had not been able to use it efficiently, they lacked knowledge of critical evaluation, selection, and usage, as well as academic skills.[13] As we know that Indonesia is experiencing rapid technological and information

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[9] Said Basri, "Prestasi Akademik Ditinjau Dari Kemampuan Literasi Media," *Jurnal Dakwah* XIII, no. 1 (2012): 15–38.

[10] Pardjono Pardjono et al., "Analisis Faktor-Faktor Penghambat Produktivitas Publikasi Karya Ilmiah Mahasiswa PPs UNY Pada Jurnal Internasional Terindeks," *Jurnal Dinamika Vokasional Teknik Mesin* 2, no. 2 (2017): 139, https://doi.org/10.21831/dinamika.v2i2.16002.

[11] M.LIS Alfida, "Menakar Program Literasi Informasi Melalui Karya Ilmiah Mahasiswa," *Pusat Perpustakaan UIN Syarif Hidayatullah Jakarta* 14, no. 1 (2016): 1–19.

[12] Jia Li, Amareen Brar, and Novera Roihan, "The Use of Digital Technology to Enhance Language and Literacy Skills for Indigenous People: A Systematic Literature Review," *Computers and Education Open* 2 (December 2021): 100035, https://doi.org/10.1016/j.caeo.2021.100035.

[13] Siriwatchana Kaeophanuek, Na-Songkhla Jaitip, and Prachyanun Nilsook, "How to Enhance Digital Literacy Skills among Information Sciences Students," *International Journal of Information and Education Technology* 8, no. 4 (2018): 292–97, https://doi.org/10.18178/ijiet.2018.8.4.1050.

advancements, evident in the way society behaves. Consequently, the education sector must be capable of readying students to confront the latest technological advancements, enabling them to excel in the professional world.[14]

Considering the information presented, the Arabic language education study program at Sunan Kalijaga State Islamic University, Yogyakarta has the potential to produce quality scientific papers for publication at national and international levels. Students with more mature and productive thinking in producing research to find solutions or provide new innovations in enriching the body of knowledge in the field of Arabic language education. In order to succeed in government attention and higher education regulations, students and lecturers are required to always increase productivity in terms of research literacy and scientific work. In this case, study program leaders must be proactive in preparing a learning environment that is able to stimulate an increase in scientific publications both in terms of quantity and quality. Departing from this, this article focuses on the efforts of the Arabic Language Education study program to increase literacy in research and periodic scientific work in 2015 - 2020. It is hoped that the results of this research are able to contribute to similar study programs to increase the literacy of their students' scientific work.

METHOD

This research is qualitative research using descriptive methods. Descriptive is explaining a symptom or fact to provide as accurate data as possible about the symptom or fact. Data collection uses observation, interview, and documentation methods. The data analysis technique used in this research is the Miles and Huberman model data analysis technique which will be carried out in three stages, namely data reduction, data presentation, then drawing conclusions.

RESULT AND DISCUSSION

The discussion on information literacy is an evergreen topic. Information literacy is considered an essential need for all individuals as part of a rapidly moving global society. Information literacy is an ability required to search, analyze, and utilize information.[15] It is a crucial skill, especially in an educational context.[16] Therefore, it is very important for someone who is involved in the academic field to have literacy skills and master them well. In the following section, we will discuss ways to enhance these literacy skills:

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[14] Erni Fatmawati and Endah Safitri, "Kemampuan Literasi Informasi Dan Teknologi Mahasiswa Calon Guru Menghadapi Pembelajaran Di Era Revolusi Industri 4.0," *Edukasi: Jurnal Pendidikan* 18, no. 2 (October 10, 2020): 214, https://doi.org/10.31571/edukasi.v18i2.1863.

[15] Dyoty Auliya Vilda Ghasya, Gio Mohamad Johan, and Lili Kasmini, "Peningkatan Kemampuan Literasi Informasi Berdasarkan Standar ACRL Melalui Pemanfaatan Multimedia Bagi Guru Sekolah Dasar," *Visipena Journal* 9, no. 2 (December 31, 2018): 374–84, https://doi.org/10.46244/visipena.v9i2.466.

[16] Ana Irhandayaningsih, "Instrument Development for Information Literacy Assessment through Analysis and Synthesis Skills in Post Covid Higher Education," ed. T.R. Soeprobowati, B. Warsito, and T. Triadi Putranto, *E3S Web of Conferences* 317 (2021): 03016, https://doi.org/10.1051/e3sconf/202131703016.

Arabic Language Education Study Program Sunan Kalijaga State Islamic University's Efforts to Increase Literacy in Research and Scientific Journals

Literacy is generally defined as a person's ability to read and write. This ability is simply interpreted as the word "literacy". If we look more deeply, literacy is not just being able to read and write but also being able to understand the meaning or message of texts that have been or will be created.[17] This means that in creating writing, a writer must be able to express his ideas with the help of language and thoughts. On the other hand, to be able to understand writing, a reader must also be able to obtain meaning from what he reads with the help of language and thinking.

As Abidin said, the basic concept of literacy is not only related to the ability to read and write. He emphasized that literacy is defined as the ability to use language and images in rich and varied forms to read, write, listen, speak, see, present, and think critically about ideas (1) The second concept of literacy is characterized by a number of views that state that literacy is closely related to social situations and practices (2). In the third generation, the concept of literacy was expanded by the increasingly rapid development of information and multimedia technology (3). The fourth literacy is critical literacy (4). The fifth literacy is known as multiliteracy, namely the skill of using various ways to express and understand ideas and information using conventional and innovative forms of text, symbols and multimedia.[18]

Scientific articles are articles prepared based on scientific methods that have been carried out systematically. Scientific articles are believed to be an important component in realizing quality higher education.[19] Referring to the opinion above, the purpose of efforts to increase literacy in research and scientific journals in this article is an effort oriented towards improving reading and writing skills as well as understanding the meaning or message of texts that have been or will be created which are arranged systematically in accordance with the rules correct method. The results of this research show that in an effort to improve students' literacy skills in scientific articles, it can be viewed from three things, (1) viewed from classroom learning, (2) viewed from activities outside of class and (3) other efforts obtained independently. by students. These three reviews will be explained in the following discussion.

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[17] Evelina Satriya Salam, "Membangun Budaya Literasi Melalui Mata Kuliah Bahasa Indonesia Sebagai Media Revolusi Mental Generasi Produktif," *Didaktika* 11, no. 2 (2019): 158, https://doi.org/10.30863/didaktika.v11i2.163.

[18] dan Hana Yunansah Abidin, Yunus, Tita Mulyati, *Pembelajaran Literasi: Strategi Meningkatkan Kemampuan Literasi Matematika, Sains, Membaca, Dan Menulis* (Jakarta: Bumi Aksara, 2017).

[19] Nurul Rofiqo, Agus Perdana Windarto, and Anjar Wanto, "Penerapan Metode VIKOR Pada Faktor Penyebab Rendahnya Minat Mahasiswa Dalam Menulis Artikel Ilmiah," *Seminar Nasional Sains & Teknologi Informasi (SENSASI)* 1, no. 1 (2018): 228–37.

Arabic Language Education Study Program Sunan Kalijaga State Islamic University's Efforts to Increase Literacy in Research and Scientific Journals Seen from Classroom Learning

In reviewing classroom learning, efforts to improve literacy skills carried out by the Arabic Language Education study program, Sunan Kalijaga State Islamic University can be seen from several things as follows:

a. Assistance in writing scientific articles

Assistance in writing scientific articles is provided by lecturers during the learning process in class. This mentoring activity is concerned with strategies for writing scientific articles in accordance with applicable scientific journal standards. In preparing it, students are provided with information about journals that can be accessed, both for references and/or to submit scientific articles for publication in these journals. Article writing assistance activities are very effective in increasing students' understanding of types of scientific work, such as journal articles and proceedings. This can be seen from the results of student publications which are increasing over time.

Assistance in writing scientific articles is carried out in stages by adjusting to the student's level of understanding of the world of writing. With this gradual method, students are expected not to rush in writing. Because, writing is a process that involves understanding. By rushing through writing, there is less potential for students to understand what they write.

b. Motivate students to write scientific articles to be published in various journals

In simple terms, the definition of motivation is what makes you act, keeps you doing it, and determines the direction you want to act. Motivation to do something can appear in various forms. Nur further explained that motivation can be a personal trait or someone's personality; Certain individuals may have a stable and long-lasting interest in participating in a wide variety of activity categories such as academics, sports, or social activities.[20]

In relation to improving students' literacy skills, motivation is something that is emphasized in the learning process. This means that during the process of writing and publishing articles, students are always given support and motivation to do their best. Lecturers always provide motivation and support during the learning process as motivation is something very important and influential in order to succeed in the world of education as well as in the real world.[21] This is done so that students work consistently and do their best.

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[20] Maria Waldetrudis Lidi and Ningsih, "Analisis Minat Dan Motivasi Dalam Penulisan Karya Ilmiah Pada Mahasiswa Program Studi Pendidikan Matematika Universitas Flores," *TEKNOSIAR* 3, no. 1 (2018): 9–19.

[21] Valarmathie Gopalan et al., "A Review of The Motivation Theories in Learning" (The 2nd International Conference on Applied Science and Technology 2017 (ICAST'17), Kedah, Malaysia, 2017), 020043, https://doi.org/10.1063/1.5005376.

Arabic Language Education Study Program Sunan Kalijaga State Islamic University's Efforts to Increase Literacy in Research and Scientific Journals Seen from Activities Outside the Classroom

In reviewing activities outside the classroom, efforts to improve literacy skills carried out by the Arabic Language Education study program, Sunan Kalijaga State Islamic University can be seen from several things as follows:

a. Developing the al-Mahara journal

Al-Mahāra: Journal of Arabic Language Education (p-ISSN: 2477-5827; e-ISSN: 2477-5835) is a journal published by the Arabic Language Education study program at the Sunan Kalijaga State Islamic University (UIN) Yogyakarta twice a year in June and December. Al-Mahāra is oriented to be an international journal indexed by Scopus. This journal focuses on the problem of learning Arabic in schools, madrasas, and/or Islamic boarding schools in Southeast Asia. We invite scholars, researchers and professionals in the field of Arabic Language Education to invest your knowledge in the form of research or in-depth study.

As one of the development laboratories in Arabic language studies, al-Mahara provides a lot of support to provide information and knowledge for students to compose articles. By developing the al-Mahara journal, fulfilling students' needs regarding journaling has the potential to be easier. Of course, this plays a big role in the success of improving students' literacy skills.

b. Involving students in managing the al-Mahara journal

Good scientific journal management consists of two important things, namely: (a). journal editorial management according to publishing standards; and (b). how to maintain the quality of editing of substance, style and format. E-journal management regulates how a manuscript is treated from the time the manuscript is received until it is published, and the quality of editing, style and format that reflects the contents of a journal.

By collaborating and involving students in the above process, students have provisions and experience that really support the development of their literacy skills. This is because the process of managing this journal is a systematic process, so that the involvement of students in its management will provide a full understanding of the world of journals. With this understanding, students will be able to produce work in accordance with applicable regulations.

Other Forms of Efforts Obtained Independently by Students

As for reviewing activities outside the classroom, efforts to improve literacy skills carried out by the Arabic Language Education study program, Sunan Kalijaga State Islamic University can be seen from several things as follows:

a. Organizing scientific writing seminar activities

Current developments in science and technology increasingly encourage the development of scientific research. Research progress must be accompanied by

improvements in the quality of scientific writing so as to produce good publications that can represent research findings. In order to improve literacy skills, Arabic Language Education study program, Sunan Kalijaga State Islamic University held a scientific writing seminar aimed at students. This activity was carried out to train scientific writing skills and abilities for Arabic Language Education students, Sunan Kalijaga State Islamic University. This activity is a form of support outside the classroom provided by the study program. Through this activity, it was seen that students' understanding of writing scientific articles and procedures for submitting manuscripts to accredited journals increased.

b. Utilizing technology and social media

It cannot be denied that technology is rapidly advancing in the present era. Various sources of knowledge can easily be accessed and read through smartphones. Almost all daily needs can be met and obtained through smartphones,[22] including communication, entertainment, shopping,[23] working, learning, and interacting with the world, including healthcare services.[24] If someone is not careful in using it, they can become addicted without realizing it.[25]

Nowadays, almost every student has a smartphone that can be used to access various information. Not only on academic websites such as journal articles, blogs, Wikipedia, or the like, but also on social media platforms like YouTube, TikTok, or Instagram, which are known primarily as entertainment apps but also contain academic information. These media can be very useful for learning.[26] This aligns with what Laura Silver, Aaron Smith, Courtney Johnson, Kyle Taylor, Jingjing Jiang, Monica Anderson, and Lee Rainie have conveyed, that social media also plays a role in influencing the field of education.[27]

This is how efforts can be made to enhance students' literacy skills in research and scientific article writing. This can be seen from three aspects: (1) viewed from classroom learning, (2) viewed from activities outside of class and (3) other efforts obtained independently by students.

From the aspect of classroom learning, the efforts made by the Arabic Language Education study program, Sunan Kalijaga State Islamic University are

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[22] Gabriella M Harari et al., "Smartphone Sensing Methods for Studying Behavior in Everyday Life," *Current Opinion in Behavioral Sciences* 18 (December 2017): 83–90, https://doi.org/10.1016/j.cobeha.2017.07.018.

[23] Tom Ough, "The Surprising Ways Cellphones Have Changed Our Lives," BBC Future, accessed November 2, 2023, https://www.bbc.com/future/article/20230331-the-surprising-way-cellphones-changed-our-lives.

[24] Ginger E Nicol et al., "A Smartphone-Based Technique to Detect Dynamic User Preferences for Tailoring Behavioral Interventions: Observational Utility Study of Ecological Daily Needs Assessment," *JMIR mHealth and uHealth* 8, no. 11 (November 13, 2020): e18609, https://doi.org/10.2196/18609.

[25] Jorge H. V. Caracol, Braulio Alturas, and Antonio Martins, "A Society Ruled by The Impact of The Smartphone: Influence That the Use of The Smartphone Has in People's Daily Lives," in *2019 14th Iberian Conference on Information Systems and Technologies (CISTI)* (2019 14th Iberian Conference on Information Systems and Technologies (CISTI), Coimbra, Portugal: IEEE, 2019), 1–6, https://doi.org/10.23919/CISTI.2019.8760845.

[26] Interview with Muhammad Nuruzzaman Syam, September 2020, at State Islamic University Sunan Kalijaga Yogyakarta.

[27] Laura Silver et al., "Mobile Connectivity in Emerging Economies," *Pew Research Center* 7 (2019), https://www.academia.edu/download/59250381/Mobile_Connectivity_in_Emerging_Economies20190514-108489-161z7vs.pdf.
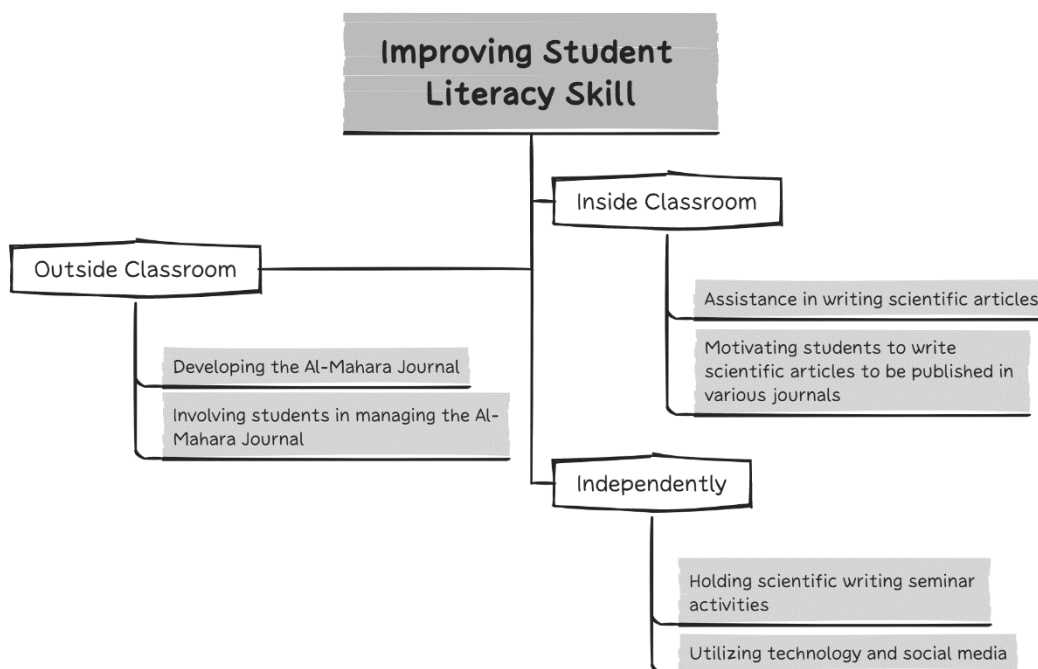
(1) assistance in writing scientific articles, (2) motivating students to write scientific articles to be published in various journals.

From the aspect of outside classroom learning, the efforts made by the Arabic Language Education study program, Sunan Kalijaga State Islamic University are (1) developing the Al-Mahara Journal as an effort to provide information and knowledge for students to compose articles, (2) involving students in managing the Al-Mahara Journal.

From the aspect of another effort obtained independently by students which is also inseparable from the efforts of the Arabic Language Education study program, Sunan Kalijaga State Islamic University are (1) holding scientific writing seminar activities so that through this experience students can increase their understanding of writing scientific articles, (2) utilizing technology and social media to explore information related to research and academic article writing. This can be seen as a whole in the following figure:

Figure 1
Arabic Language Education Study Program Sunan Kalijaga State Islamic University's Efforts to Increase Literacy in Research and Scientific Journals

CONCLUSION

Improving students' literacy skills is very important. It is a long-term investment that will assist them in their learning, careers, and everyday lives. Consistent and sustainable efforts will help students develop strong literacy skills.

Based on what has been discussed previously, it can be known that there are indeed many things that can be done, especially by educational institutions, to strive to improve the literacy skills of their students. This includes activities both inside and outside the classroom, such as providing guidance in learning,

conducting training, organizing seminars, and, of course, facilitating, supporting, and motivating students to continue their creative work.

With this article, hopefully, it can promote awareness of the importance of academic literacy and provide concrete solutions for educational institutions and students to overcome obstacles in writing their academic articles.

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