



NETNOGRAPHY METHOD TRAINING FOR STRENGTHENING DIGITAL LITERACY AND RESEARCH COMPETENCE IN SOCIAL MEDIA AMONG ARABIC LANGUAGE EDUCATION STUDENTS

Shobirin

Universitas Islam Zainul Hasan Genggong
Email : birinsho489@gmail.com

Abstract:

The rapid development of digital technology has transformed research practices, particularly in the use of social media as a data source and research object. In the context of Arabic Language Education, students are required not only to possess linguistic competence but also to develop digital literacy and research skills that are relevant to contemporary advancements. However, in practice, many students still face limitations in critically and methodologically utilizing social media for research purposes. Therefore, a systematic effort is needed to enhance both digital literacy and research competence through adaptive approaches, one of which is the netnography method. This community service program aims to improve students' digital literacy and social media research competence in Arabic Language Education through training in netnography methods. The implementation employs a participatory approach consisting of training sessions, guided practice, and evaluation. The results indicate a significant improvement in students' understanding of digital literacy concepts and netnography methods, as well as their skills in conducting systematic and critical social media-based research. Students are also able to produce simple netnography-based research designs relevant to Arabic Language Education. Therefore, this program contributes to enhancing students' academic capacity in adapting to digital developments and encourages the production of innovative research based on social media.

Keywords: digital literacy, netnography, social media research, Arabic language education, community service

INTRODUCTION

The rapid development of digital technology has brought fundamental changes in various aspects of life, including education and research. One of the most prominent phenomena is the increasing use of social media as a space for interaction, communication, and learning. In Indonesia, data from the We Are Social 2021 report recorded that out of approximately 274.9 million inhabitants, around 170 million people, or approximately 61.8%, were actively using various social media platforms (Eriyanto, 2021). This figure reflects the importance of social media in Indonesian society, including in the context of higher education.

In the field of Arabic Language Education, social media is no longer merely a communication tool; it has evolved into an active and dynamic learning environment. Lecturers and students utilize platforms such as YouTube, TikTok, Instagram, WhatsApp, and Facebook as media for teaching, learning, and sharing linguistic content. This transformation marks a paradigm shift from conventional classroom-based learning toward an open, connected, and participatory digital learning ecosystem (Jailani et al., 2024).

Nevertheless, the great potential of social media as a research data source has not been fully and optimally utilized by Arabic Language Education students. Many

*Corresponding author.
E-mail addresses: birinsho489@gmail.com

students still use social media passively and consumptively, without the ability to turn it into a based research methodology training relevant to the current era. Traditional learning theories such as behaviorism, cognitivism, and constructivism that have long dominated Arabic language education research were developed long before the era of social media, and thus cannot fully explain the dynamics of learning occurring in digital environments (Ajito, 2024).

To address this challenge, a more relevant and adaptive methodological approach is needed. One method considered appropriate is netnography – a qualitative research method based on ethnography, specifically designed to study culture and communities in digital spaces (Kozinets, 2010). Netnography enables researchers to observe, participate in, and analyze interactions within virtual communities in depth, from within the digital environment itself (Eriyanto, 2021). This method aligns with the principles of connectivism theory developed by George Siemens and Stephen Downes, which views learning as a process of forming and maintaining knowledge networks in the digital age (Siemens, 2005).

Based on the foregoing background, this Community Service (PKM) activity was designed as a response to the actual needs of Arabic Language Education students to improve their digital literacy and social media-based research competence. This activity takes the form of netnography method training conducted participatorily, with the hope of producing a generation of researchers who are adaptive, critical, and innovative in facing the challenges of the digital era.

The integration of digital technology into Arabic language learning has become an increasingly important research topic over the past decade. Various studies have demonstrated that the utilization of digital technology makes a positive contribution to the effectiveness of Arabic language learning, among others by facilitating access to learning content, increasing student participation and engagement, and facilitating interaction and social network formation (Rahman et al., 2023).

More specifically, a number of studies have examined the use of particular social media platforms in Arabic language learning. Linur and Mubarak (2020) investigated the use of Facebook as a medium for developing writing skills (maharah kitabah). Robbani et al. (2021) examined the challenges of using WhatsApp as an online Arabic learning hub. Umbar (2023) focused on YouTube-based Arabic language learning through the Arab Podcasts channel. Wijaya and Rismawati (2023) studied the use of Instagram to increase the learning interest of Madrasah Tsanawiyah students. Meanwhile, Aminullah et al. (2022) explored independent Arabic language learning through the TikTok platform.

Nonetheless, most of these studies remain descriptive or focused on measuring the effectiveness of specific platform use. There is still very limited research that comprehensively examines the phenomena of Arabic language learning communities on social media using a thorough theoretical and methodological framework suited to the characteristics of the digital age.

Connectivism theory developed by George Siemens (2005) and Stephen Downes (2012) offers a new perspective on learning in the digital age. Unlike traditional learning theories, connectivism views knowledge as something distributed across networks, not stored solely within individuals. Learning, in this view, is the process of forming connections between various information sources and knowledge nodes (Siemens, 2005).

There are eight core principles of connectivism theory relevant to this research

context: (1) learning and knowledge rest in diversity of opinions; (2) learning is a process of connecting specialized nodes or information sources; (3) learning may reside in non-human appliances; (4) the capacity to know more is more critical than what is currently known; (5) nurturing and maintaining connections is needed to facilitate continual learning; (6) the ability to see connections between fields, ideas, and concepts is a core skill; (7) currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities; and (8) decision-making is itself a learning process (Siemens, 2005; Downes, 2012).

In the context of Arabic language learning on social media, connectivism theory becomes an appropriate analytical lens for understanding how virtual communities are formed, how linguistic knowledge circulates in digital networks, and how interactions among users contribute to the collective learning process.

Netnography is an adaptation of ethnographic methods for digital spaces (Kozinets, 2010). The term combines the words "internet" and "ethnography," and refers to a qualitative research procedure designed to understand social and cultural phenomena within virtual communities. This method enables researchers to observe, participate in, and analyze interactions within online communities in a profound and contextual manner (Eriyanto, 2021).

In practice, netnography encompasses several main stages: (1) virtual observation, which is passive observation of interactions and behaviors in online communities; (2) active participation in community discussions and conversations; (3) analysis of digital materials including text, images, videos, and other multimedia content; (4) online interviews when needed to deepen understanding; and (5) combined data collection to obtain more comprehensive data (Arianto & Saeroji, 2025).

The advantage of netnography over conventional research methods lies in its ability to reveal the complexity of social and cultural interactions within digital communities naturally, without the distortion that may arise from the physical presence of the researcher in the field. This method is highly relevant for studying Arabic language learning communities on social media platforms such as YouTube and TikTok (Bungin, 2023).

RESEARCH METHODS

1. Approach and Activity Design

This Community Service (PKM) activity was carried out using a participatory approach – an approach that positions students as active subjects in the learning process. In this approach, students are not merely recipients of information (passive learners), but are also directly involved in the processes of exploration, discussion, practice, and reflection on the material provided. Thus, it is expected that a more meaningful and sustainable learning process will occur.

The activity design was structured systematically, in an organized and phased manner to ensure that the training objectives were optimally achieved. In general, the activity consisted of three main phases:

- (1) Training, focused on providing conceptual materials related to netnography, the use of digital media in Arabic language learning, and the introduction of data collection and analysis techniques based on online activities;

- (2) Guided Practice, the stage where students directly practice the material they have received under intensive guidance from the implementing team, enabling students to apply concepts in real contexts; and
- (3) Evaluation, aimed at measuring the level of understanding, skills, and effectiveness of the activity implementation through reflection, feedback, and assessment of student work.

In addition, this activity was also designed to have sustainability by integrating it into the campus academic environment. Thus, the results of this activity do not end with the PKM program alone, but can also be practically utilized by students to support their coursework, research, and academic competence development – particularly in the field of digital-based Arabic language learning.

The activity was carried out in phases on Sundays, March 8, 15, and 22, 2026. All activities took place in the Computer Laboratory at Universitas Islam Zainul Hasan Genggong. This location was chosen based on the availability of adequate supporting facilities, such as computers and internet access, to support the smooth conduct of digital-based training and practice.

2. Target Participants

The primary targets of this Community Service (PKM) activity are students of the Arabic Language Education Study Program at Universitas Islam Zainul Hasan Genggong Probolinggo. This selection was based on students' academic needs in facing the development of Arabic language learning and research that is increasingly integrated with digital technology and social media.

More specifically, this activity targets students who have an interest and inclination toward social media-based research (digital research), particularly through the netnographic approach. In addition, this activity also targets students who wish to improve their digital literacy competence, critical thinking ability, and methodological skills in conducting scientific research relevant to the context of Arabic language learning in the digital age.

Through this activity, students are expected not only to understand the basic concepts of digital media-based research, but also to be able to independently apply various data collection and analysis techniques. Thus, this activity contributes to equipping students with 21st-century competencies, such as the ability to manage information, collaborate online, and produce scientific works based on empirical data from digital activities.

Furthermore, the activity targets the strengthening of academic culture on campus, where students can utilize the results of this training as a foundation for preparing their final projects, research, and scientific publications. In other words, this activity is not merely incidental, but has a long-term orientation toward improving the academic quality and professionalism of Arabic Language Education students.

3. Implementation Phases

The implementation of this PKM activity was divided into three phases as follows: Training Phase: In this phase, students were provided with conceptual material covering three main topics: (a) the concept and urgency of digital literacy for students in the digital age; (b) the principles, procedures, and steps of the netnography method; and (c) the use of social media, particularly YouTube and TikTok, as valid and scientifically accountable research data sources.

Guided Practice Phase: Students were directly guided in conducting social media data analysis using a netnographic approach. Guidance included: virtual observation practice in Arabic language learning communities on YouTube and TikTok, data collection in the form of video content, comments, and user interactions, as well as qualitative interpretation and meaning-making of the data based on the connectivism theoretical framework.

Evaluation Phase: Evaluation was conducted to measure the level of achievement of the activity objectives. Evaluation instruments included a conceptual understanding test before and after training (pre-test and post-test), assessment of simple netnography research designs prepared by each student, and group reflection and discussion to identify obstacles and improvement recommendations.

4. Criteria for Platform and Content Selection

During the practical sessions, the selection of social media content used for analysis followed standardized and measurable criteria. For both YouTube and TikTok platforms, selected content was required to meet minimum standards: (1) a minimum of 5,000 subscribers or followers; (2) a minimum of 5,000 views; and (3) a minimum of 50 active interactions in the comments section. These criteria were established to ensure that the data collected comes from active

RESULTS AND DISCUSSION

1. Improvement in Understanding of Digital Literacy

The evaluation results of the activity show a significant increase in students' understanding of the concept of digital literacy. This improvement is evident from the comparison between the initial conditions (pre-activity) and the conditions after completing the entire training series (post-activity). In the initial phase, most participants tended to interpret digital literacy in a limited way – merely as technical skill in operating digital devices, such as using computers, applications, and social media.

However, after participating in the training and mentoring sessions, a fairly fundamental shift in understanding occurred. Students began to understand digital literacy as a multidimensional competence. Digital literacy was no longer viewed solely as a technical skill, but also encompassed the ability to think critically in filtering information, the ability to evaluate the credibility and validity of digital sources, and the ability to produce and utilize content responsibly. In addition, students also began to understand the importance of digital ethics (digital ethics), including awareness of digital footprints and the appropriate use of social media for academic purposes.

This change in understanding is inseparable from the learning strategy used in the PKM activity, namely a participatory and practice-based approach. Through interactive discussions, case studies, and direct practice of social media content analysis, students gained contextual and applied learning experiences. This strengthened the internalization of digital literacy concepts more deeply compared to purely theoretical learning.

Theoretically, this finding aligns with the digital literacy framework that emphasizes the importance of integrating technical, cognitive, and social competencies. Digital literacy encompasses the ability to access, understand, analyze, evaluate, and create information in various digital forms. Thus, the increase in understanding experienced

by students shows that this activity successfully shifted their paradigm from merely being technology users to being critical, reflective, and productive users.

Furthermore, this improvement in digital literacy understanding becomes an essential foundation for students in conducting social media-based research, particularly in the netnographic approach. With this foundation, students are expected to be able to collect data systematically, maintain the validity and reliability of data, and consider ethical aspects in digital research. Therefore, these results not only impact knowledge improvement but also contribute to students' methodological readiness to produce quality and responsible scientific works.

2. Mastery of the Netnography Method

In the aspect of mastering the netnography method, students demonstrated progressive and continuous development throughout the course of the activity. This can be seen from the change in students' level of understanding and skills between the early training phase and the final evaluation phase. In the initial phase, most participants were still unfamiliar with the concept of netnography, both in terms of its theoretical basis and its operational procedures in research. Some students even equated netnography with online research in general, without understanding its distinctive characteristics as an adaptation of ethnography in the digital context.

However, through systematic material delivery and intensive guided practice, students gradually began to understand the essence and stages of netnographic research. The learning process not only emphasized conceptual aspects but also provided students with direct experience in observing online communities, particularly Arabic language learning communities on social media.

More specifically, students demonstrated improved capabilities in several key areas. First, students were able to distinguish between passive virtual observation (lurking) and active participation (engagement) in online communities, as well as understand the methodological and ethical implications of each approach. Second, students became skilled in collecting digital data, such as posts, comments, user interactions, and hashtag usage, and then organizing it systematically into relevant analytical categories. Third, students also showed initial capability in interpreting the meanings contained in digital interactions, including understanding the social, cultural, and linguistic context underlying communication within the community.

In addition, students also began to understand the importance of ethical aspects in netnographic research, such as maintaining participant anonymity, considering data privacy, and using digital data responsibly. This awareness is an important indicator that students not only master research techniques but also understand the academic responsibility that accompanies them.

This finding aligns with the view of Eriyanto (2021) who states that netnography is an effective method for revealing the complexity of social interactions in digital communities naturally, contextually, and without distortion from excessive researcher intervention. Thus, the improvement in netnography method mastery experienced by students demonstrates that this PKM activity successfully equipped participants with methodological skills relevant to the development of research in the digital era.

Furthermore, this achievement makes an important contribution to students' readiness to independently conduct social media-based research. Students not only understand the research steps, but also have the initial ability to develop research designs, process digital data, and compose analyses based on empirical findings.

Therefore, the mastery of the netnography method is one of the main indicators of success of the PKM activity in improving the academic quality of Arabic Language Education students.

3. Production of Netnography-Based Research Designs

One of the most significant concrete achievements of this activity is the students' ability to develop simple netnography-based research designs relevant to the field of Arabic Language Education. The research designs produced by students include: identification of appropriate research topics, selection of social media platforms as data sources, establishment of content selection criteria, design of data collection procedures, and planning of qualitative data analysis techniques.

Most student research designs focused on studying Arabic language learning communities on YouTube and TikTok. This reflects the relevance and contemporariness of the raised topics, given that both platforms have become the most dynamic and popular Arabic language learning ecosystems among Indonesian youth today (Jailani et al., 2024).

4. Relevance to Connectivism Theory

The training process and its impact on student competence can be understood through the lens of connectivism theory. During the activity, students did not merely receive information passively but actively built connections between prior knowledge and new concepts introduced. Interactions among participants, group discussions, and direct exploration on social media platforms created a rich and meaningful learning network.

In line with the connectivism principle that "knowledge resides in networks, not merely in individuals" (Downes, 2012), this PKM activity successfully encouraged students to transcend the boundaries of individual learning and move toward collaborative learning that is digitally connected. This opens opportunities for the growth of a more dynamic and innovative research community in the Arabic Language Education environment.

CONCLUSION

The Community Service activity in the form of netnography method training for Arabic Language Education students at Universitas Islam Zainul Hasan Genggong Probolinggo has successfully achieved its established objectives. Overall, this activity made a real contribution in three main aspects. First, it improved students' comprehensive understanding of digital literacy concepts – not merely as technical ability but also as the capacity for critical and reflective thinking about digital content. Second, it enhanced students' mastery of the netnography method as a relevant and adaptive research approach for examining learning phenomena in the social media era. Third, it enabled students to produce simple netnography-based research designs relevant to Arabic Language Education.

The success of this activity affirms the importance of updating research methodology approaches in Arabic language education, from those that rely solely on traditional theories and methods toward methodologies that are more responsive to the development of the digital environment. The integration of connectivism theory as an analytical framework and netnography as a research method offers a richer and more comprehensive perspective for understanding the dynamics of Arabic language

learning in digital spaces.

Going forward, it is recommended that similar activities be implemented more broadly and continuously, involving more students and expanding the scope of social media platforms studied. In addition, a digital research methodology training curriculum or module should be developed that can be formally integrated into the Arabic Language Education study program, so that digital research competence becomes an inseparable part of graduates' profiles.

REFERENCES

- Ajito, T. (2024). The Role of Connectivism in Digital Learning. *Journal on Education*, 7(1), 6968–6976.
- Aminullah, M. A., et al. (2022). Independent Arabic Language Learning through the TikTok Application Platform as a Current Learning Trend. *Jurnal Al Mi'yar: Jurnal Ilmiah Pembelajaran Bahasa Arab dan Kebahasaan*, 5(2), 123–133. <https://doi.org/10.35931/am.v5i2.1219>
- Arianto, B., & Saeroji, A. (2025). *Introduction to Netnographic Research Methods*. Balikpapan: Borneo Novelty Publishing.
- Ariyanto, A., & Fauziati, E. (2022). Online Learning in Elementary Schools from the Perspective of George Siemens' Connectivism Learning Theory. *Jurnal Ilmiah Mitra Swara Ganesha*, 9(2). ISSN 2356-3443.
- Bungin, B. (2023). *Netnography: Social Media Research Procedure, Big Data & Cybercommunity*. Jakarta: Kencana.
- Downes, S. (2012). *Connectivism & Connective Knowledge*. Canada: National Research Council Canada.
- Eriyanto. (2021). *Netnography Method: A Qualitative Approach to Understanding the Culture of Social Media Users*. Bandung: Remaja Rosda Karya.
- Jailani, M., et al. (2024). Social Media as a Platform for Learning the Arabic Language for Generation Z. *Kitaba: Journal of Interdisciplinary Arabic Learning*, 2(1), 10–18. <https://doi.org/10.18860/kitaba.v2i1.25404>
- Kozinets, R. V. (2010). *Netnography: Doing Ethnographic Research Online*. London: SAGE Publications Ltd
- Kurniati, D. (2022). The Use of Social Media in Arabic Language Learning with a Blended Learning Model. *Jurnal Ta'limi*, 1(2). <https://doi.org/10.53038/tlmi.v1i2.32>
- Linur, R., & Mubarak, M. R. (2020). Facebook as an Alternative Medium for Developing Maharah Kitabah. *Jurnal Naskhi*, 2(1). <https://doi.org/10.47435/naskhi.v2i1.154>
- Rahman, M., et al. (2023). The Use of Social Media as a Learning Medium. *Journal on Education*, 5(3), 10646–10653.
- Robbani, A. S., et al. (2021). Challenges in Using WhatsApp as an Online Arabic Learning Center. *Jurnal Dinamika Ilmu*, 21(2). <https://doi.org/10.21093/di.v21i2.3691>
- Rosyidi, A. W., & Sari, R. R. (2023). Dynamics of Arabic Language Learning Thought (Map of Dissertation Studies in Doctoral Programs of Arabic Language Education). Postgraduate School, UIN Maulana Malik Ibrahim Malang.
- Siemens, G. (2005). Connectivism: A Learning Theory for the Digital Age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 3–10.

- Umbar, K. (2023). YouTube-Based Arabic Language Learning: A Study of the Arab Podcasts Channel. *Jurnal Pendidikan dan Konseling (JPDK)*, 5(2). <https://doi.org/10.31004/jpdk.v5i2.12602>
- Wijaya, M., & Rismawati, R. S. Y. (2023). Instagram-Assisted Arabic Language Learning to Increase Learning Interest of Madrasah Tsanawiyah Students. *Jurnal Educatio*, 9(2). <https://doi.org/10.31949/educatio.v9i2.5080>
- Wicaksono, D., & Suradika, A. (n.d.). Connectivism Theory-Based Learning Design: A Curriculum Evaluation Working Paper in the Master of Educational Technology Study Program, Universitas Muhammadiyah Jakarta. *Jurnal Perspektif*, 2(1), 27.