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The Urgency of the Ability to Write Scientific Work for Teachers (Empirical Study on Community Service Activities of Mercu Buana University Lecturers)

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Abstract

This article aims to reveal teachers' obstacles and challenges in developing scientific writing skills and improve teachers' understanding and skills in using systematic writing techniques. The methods include literature studies, document analysis, surveys and questionnaires, training, and evaluation and feedback. The results of this community service activity indicate that most teachers have never written a scientific article, indicating a significant problem in scientific writing skills. To overcome this, the activity involved knowledge transfer by lecturers from Mercu Buana University who provided an understanding of the benefits of scientific articles, applicable research methods, research applications, and tips in compiling gap phenomena, problem formulations, research objectives, and implications of scientific work. The evaluation showed that this activity succeeded in achieving its objectives with a high level of satisfaction among the participants. Furthermore, the implication of this activity is the improvement of teachers' scientific writing skills, which is expected to improve the quality of their education and professionalism.

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BACKGROUND

The ability to write scientific articles is an essential skill for teachers in Indonesia to improve the quality of education and professionalism. Furthermore, according to the Indonesian Teachers Association (IGI) Hulu Sungai Tengah, the writing ability among teachers is still far from what is expected by the government, which stipulates that every teacher must be able to produce at least one article, book, or scientific paper every year (Rahman & Maskuriah, 2016). This shows that scientific writing is essential as part of teachers' professional duties and as a means to share knowledge and experience and contribute to developing science and educational practice in Indonesia. Furthermore, the

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research carried out by Rustam & Priyanto (2022), the research found that many Indonesian secondary school teachers need more scientific insight and skills, which hinders their ability to write scientific articles. In this regard, there needs to be a more effective training and guidance program to improve teachers' skills in making scientific papers. In line with this, Haryono & Adam (2021) In his research, he stated that improving undergraduate students' scientific writing skills is crucial to preparing them to become competent educators.

Moreover, other research, such as those conducted by Cetin & Eymur (2017) and Putri & Rusdiana (2017) It also found that teachers face significant challenges in developing scientific presentation, writing, and argumentative skills with their students. Various studies have shown that teachers' scientific writing skills are crucial in developing students' scientific presentation, writing, and argumentation skills. The following are some of the negative impacts that can occur if teachers do not have adequate scientific writing skills:

- Inhibiting students' ability in writing skills (Haryono & Adam, 2021).
- Students miss the opportunity to hone the essential skills to craft solid arguments and present their research well (Cetin & Eymur, 2017).
- When teachers do not have adequate scientific writing skills, they also tend to be less able to teach compelling reading and argumentation techniques to students (Hendratmoko et al., 2023; Munawaroh et al., 2020).
- If teachers do not have the skills to facilitate in-depth scientific discussions and encourage students to think critically, then there is a potential that students will not be able to develop the analytical skills necessary to succeed in their advanced studies and professional lives (Al-Ajm & Ambusaidi, 2022; Fasha & Sopandi, 2024).
- Referring to research conducted by Satriya & Atun (2024), states that problem-based learning modules can effectively train students in scientific arguments. However, if teachers do not have adequate writing and scientific thinking skills, the implementation of these modules may not be effective.

Following this phenomenon, it is necessary to transfer knowledge from the lecturers of Mercu Buana University, which aims to improve the knowledge and ability of teachers to write scientific papers. The knowledge transfer activities are part of the lecturers' community service. Therefore, the formulation of the problem in this community service article is related to:

- How is the condition of teachers' scientific article writing skills?
- How to improve teachers' writing skills?

Referring to the phenomena and problem formulation, the objectives of this article are as follows:

- Revealing the obstacles and challenges teachers face in developing scientific writing skills.
- Improving teachers' understanding and skills in using systematic writing techniques.

This community service article has important implications for improving the quality of education and developing teacher professionalism in Indonesia, significantly improving the scientific writing skills of teachers so that they can compile better research-based learning materials. Furthermore, effective knowledge transfer from lecturers to teachers is needed to improve these teachers' scientific article-writing skills, which is part of community service activities (Fadila & Wiyono, 2024). Knowledge-based theory can be a solid theoretical foundation for understanding and implementing

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knowledge transfer (Widodo et al., 2023). Knowledge-based theory states that learning occurs through knowledge construction, where individuals integrate new information with existing knowledge to produce new understanding (Bairizki et al., 2021; Darmayani et al., 2022; Lim et al., 2009; Utami et al., 2017). Therefore, community service activities by lecturers, which aim to improve teachers' scientific writing skills, align with knowledge-based theory. Through knowledge transfer, lecturers can guide students on how to compile scientific papers systematically, consider essential aspects of writing, and follow the rules for writing scientific papers.

METHOD

The method used in writing a scientific journal must be in line with the formulation of the problem and objectives described in the introduction (Nugroho et al., 2024; Nurdany et al., 2024; Omizo & Hart-Davidson, 2015). The method used in writing this article includes several important stages that ensure the writing process is structured and systematic and able to provide relevant and useful results (Nugroho et al., 2023; Oktris et al., 2022). Therefore, the method used in this article aims to answer the problem formulation and achieve the objectives of community service activities in improving the scientific writing skills of teachers, so the appropriate method stage is as follows:

- Literature Study and Document Analysis: Identifying barriers and challenges in teachers' scientific writing skills and systematic writing techniques.
- Survey and Questionnaire: Assessing the condition of teachers' scientific article writing skills.
- Training: Improving teachers' understanding and skills in systematic scientific writing techniques
- Evaluation and Feedback: Assessing the effectiveness of the training program and identifying areas for improvement

Therefore, through this method, this community service activity can significantly contribute to overcoming the challenges teachers face in writing scientific papers and improving the quality of education.

DISCUSSION

Conditions of teachers' ability to write scientific articles

The implementation of community service activities was held on February 22, 2024, at Vocational High School (SMK) 2 Jakarta. Moreover, 26 vocational high school teachers attended the event. According to previous research, several obstacles have an impact on the low ability to write scientific papers of teachers, as follows:

- Low Teacher Competence
  Research conducted by Sari et al. (2022) and Khabib (2022) shows that most teachers need to understand the structure and techniques of proper scientific writing. In addition, Erliana et al. (2023) research states that many teachers need more confidence in writing scientific articles due to the lack of knowledge and skills required.
- Lack of Understanding in Writing Scientific Articles
  Referring to research conducted by Prastiwi et al. (2022) and Daud et al. (2020) Revealed that teachers need more insight into writing scientific articles, which causes them difficulty in compiling papers or journals that meet scientific

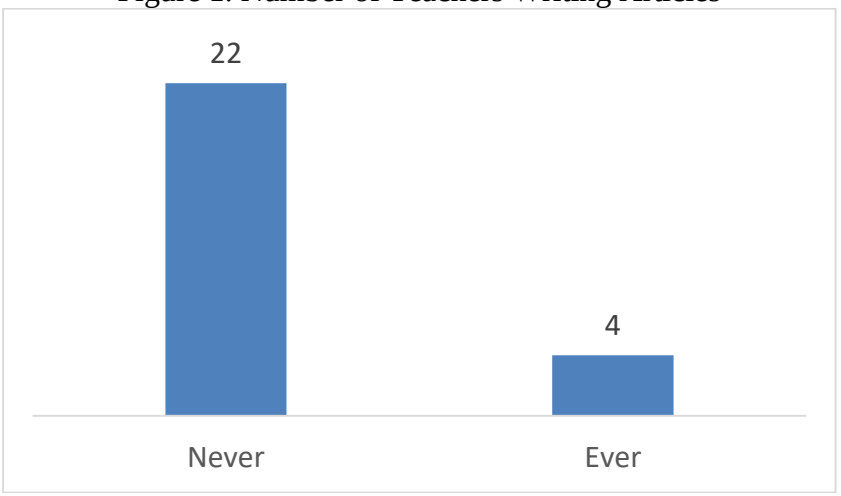
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standards. Furthermore, research conducted by Prahmana (2017) They also emphasized that teachers' lack of understanding of research methodology and academic writing makes it difficult to develop quality scientific articles.

- Low Motivation
  On the other hand, research Liang et al. (2015) It shows that low motivation is one of the main obstacles teachers face in writing scientific articles due to the need for more incentives and rewards.

Based on the results of a survey conducted in community service activities, the data shows that of the 26 teachers surveyed, the majority of teachers (22 people) have never written a scientific article. In contrast, only four people have written a scientific article. The data is shown in the image below:

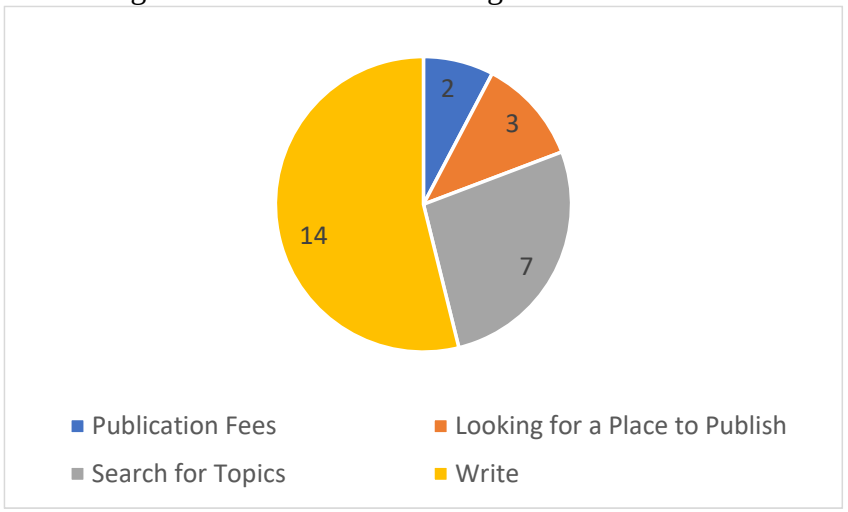
Figure 1. Number of Teachers Writing Articles



Source: Author

Following Figure 1 above, most teachers have never written scientific articles, which shows a significant problem with scientific writing skills among teachers. Furthermore, from the 26 teachers, it is known that there are obstacles that result in them never writing scientific articles, which can be illustrated in the image below:

Figure 2. Obstacles in Creating Scientific Articles



Source: Author

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Based on Figure 2 above, the obstacles faced by teachers at SMK 2, Jakarta, in compiling scientific articles can be described as follows:

- Write
  As many as 14 out of 26 teachers, or 53.85%, stated they had difficulty writing scientific articles. This obstacle is the largest among all the others. It can be caused by a lack of scientific writing skills, an inability to organize ideas, and time constraints due to high workloads. The results of this study are in line with research conducted by Susetyarini et al. (2023) which states that the majority of teachers' difficulties in writing are developing ideas, phenomena, and theories using appropriate methods.
- Search for Topics
  7 or 26.92% of teachers have difficulty finding relevant and interesting topics to research, which indicates challenges in finding the right research ideas and a lack of access to sources of information or scientific literature that can inspire research topics. The results of the survey are in line with previous research, which stated that teachers face obstacles in writing scientific papers due to lack of motivation, insufficient background knowledge about research, limited access to library resources, and limited internet access (Hamzaoui, 2021; Sari et al., 2022).
- Looking for a Place to Publish
  In addition, 3, or 11.54% of teachers, faced obstacles in finding the right place to publish their scientific articles. These obstacles included lacking information about relevant journals, the article submission process, and limited journal access. Furthermore, the findings of this community empowerment activity are reinforced by previous research, which stated that teachers were confused about sending their articles for publication (Aflahah et al., 2022).
- Publication Fees
  As many as 2 or 7.69% of teachers stated that publication costs were an obstacle for them. The high cost of submitting or publishing articles in several scientific journals can be a barrier, especially if the educational institution where they work does not provide financial support. This finding is also supported by findings from previous research conducted by Deta et al. (2022) who stated that the high costs associated with publishing in leading journals can be a significant barrier for teachers.

Improving Teachers' Writing Skills

Implementing this community service activity aims to reduce teachers' obstacles when writing scientific articles. Therefore, in this community service, knowledge transfer is carried out to teachers by lecturers from Mercu Buana University related to several solutions in writing scientific articles, including:

- Providing an Understanding of the Benefits of Scientific Articles for Careers and Incentives: Providing teachers with insight into how scientific writing can enhance their careers and bring incentives in the form of increased income or professional awards.
- Teaching Applicable Research Methods: Delivering practical and relevant research methods (qualitative and quantitative) so that they can help teachers plan and carry out research more effectively.
- Providing Tips on Using Research Apps: Teaches the use of apps like “Publish or Perish” and “Knowledge Map” to help teachers find topics, references, and

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organize information.

- Providing Tips in Compiling Gap Phenomena and Gap Research: Teaching teachers to compile gap phenomena and gap research to identify knowledge gaps that can be filled through their research.
- Providing Tips in Formulating Research Problems and Objectives: Providing guidance and strategies for formulating clear and focused research problems and objectives helps teachers focus and be effective in their research.
- Providing Tips in Determining Implications and Novelty: Teaching how to determine the implications and novelty of scientific work so that teachers can produce work that significantly contributes value to the development of science and educational practice.

Furthermore, the implementation of community service activities is expected to provide a significant positive impact on improving teachers' scientific writing skills. With improved scientific writing skills, teachers can be more confident in publishing their research results, improving the quality of their education and professionalism. The following is documentation of the implementation of the activities:

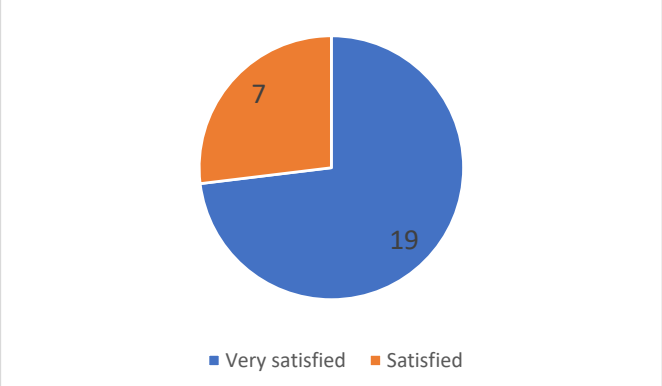
Figure 3. Documentation of Implementation of Activities for the Community



Source: Author

Following Figure 3 above, the community's activities were implemented for 4 hours, which included presentation activities, discussions, and questions and answers. Furthermore, the evaluation of the implementation of this activity based on the survey results can be illustrated as follows.

Figure 4. Evaluation of Community Service Implementation



Source: Author

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Under Figure 4 above, the survey results related to community service activities with the theme of writing scientific articles for teachers can be explained as follows:

- As many as 19 or 73.08% of teachers felt very satisfied with the community service activities that had been carried out. This shows that the material delivered, teaching methods, and facilities provided during the activities were considered very helpful and met the teachers' expectations.
- In addition, 7 or 26.92% of teachers felt satisfied with this activity, which is also a positive indicator that this activity is running well.

The factors of participant satisfaction in this activity include the following:

- Relevance of Material: The material presented is relevant to teachers' needs in improving their scientific article writing skills. Participants highly appreciate the benefits of written work for careers and incentives, applied research methods, use of research applications, and compilation of gap phenomena and gap research.
- Teaching Method: Interactive and practical teaching methods help teachers understand the concepts and techniques of scientific writing better. Training involving hands-on exercises, group discussions, and individual guidance improves teachers' writing skills.
- Support and Facilities: Adequate facilities and support from the organizers, including providing training materials, access to scientific literature, and technology, provide comfort and convenience for participants in participating in activities.

Therefore, the evaluation results suggest that this community service activity has fulfilled its primary objective: increasing teachers' knowledge and abilities in writing scientific articles.

CONCLUSION

Writing scientific articles is an essential skill for teachers in Indonesia to improve the quality of education and professionalism. However, research and survey data show that this skill still needs to improve among vocational high school teachers, especially in accounting. Some main obstacles teachers face include low competence in scientific writing, lack of understanding of research methodology, low motivation, difficulty finding topics, and constraints on costs and publication venues. Furthermore, to improve the scientific writing skills of teachers, community service activities were carried out by lecturers from Mercu Buana University who transferred knowledge related to important factors and solutions in writing scientific articles. The evaluation results showed that this activity succeeded in achieving its objectives with a high level of satisfaction among the participants.

REFERENCES

Aflahah, N. A., Rafidiyah, D., Kailani, A., & Farid, R. N. (2022). Assistance of Publishing Article on Open Journal System for English Teachers Association Members (MGMP) in South Kalimantan. *OMNICODE Journal (Omnicompetence Community Developement Journal)*, *1*(2), 75–79. https://doi.org/10.55756/omnicode.v1i2.95

Al-Ajm, B., & Ambusaidi, A. (2022). The Level of Scientific Argumentation Skills in

Chemistry Subject among Grade 11th Students: The Role of Logical Thinking. *Science Education International*, *33*(1), 66–74. https://doi.org/10.33828/sei.v33.i1.7

Bairizki, A., Irwansyah, R., Arifudin, O., Asir, M., Ganika, W. G., Karyanto, B., Lewaherilla, N., Nasfi, Nugroho, L., Hasbi, I., & Marietza, F. (2021). Manajemen Perubahan. In *Widina Bhakti Persada Bandung*.

Cetin, P. S., & Eymur, G. (2017). Developing Students' Scientific Writing and Presentation Skills through Argument Driven Inquiry: An Exploratory Study. *Journal of Chemical Education*, *94*(7), 837–843. https://doi.org/10.1021/acs.jchemed.6b00915

Darmayani, S., Pravita, V. D., Titahelu, J. A. S., Nugroho, L., Destiyanti, A. Z., Prasetyo, H., Muharam, R. S., Riyanti, D., Manik, T. S., Sopacua, M. G., Herniwati, H., Sembada, A. D., & Rinaldi, K. (2022). PENDIDIKAN ANTIKORUPSI. In N. Rismawati (Ed.), *CV WIDINA MEDIA UTAMA*. CV WIDINA MEDIA UTAMA.

Daud, A., Aulia, A. F., Rimayanti, N., & Hardian, M. (2020). a Structured Workshop: an Endeavor To Improve Teachers Competence in Writing Scientific Journal Articles. *International Journal of Educational Best Practices*, *4*(2), 88. https://doi.org/10.31258/ijebp.v4n2.p88-99

Deta, U. A., Mubarak, H., Mustar, Y. S., Kohar, A. W., & Ghofur, M. A. (2022). Study of Perceptions and Obstacles from Postgraduate Education Students About Scientific Publication as a Graduation Requirement. *International Journal of Current Educational Research*, *1*(2), 135–144. https://doi.org/10.53621/ijocer.v1i2.188

Fadila, S., & Wiyono, K. (2024). SAWT (Scientific Article Writing Training): Effectiveness in increasing Physics Teachers Competence as an Effort for Sustainable Professional Development of Teachers. *Jurnal Pendidikan Indonesia*, *13*(1), 117–128. https://doi.org/https://doi.org/10.23887/jpiundiksha.v13i1.68675 SAWT

Fasha, L. H., & Sopandi, W. (2024). Analysis of Teaching Material: To What Extent are Students' Argumentation Learning. *Proceedings of the International Conference on Teaching, Learning and Technology (ICTLT 2023)*, 285–292. https://doi.org/10.2991/978-2-38476-206-4_32

Hamzaoui, C. (2021). Scrutinizing Algerian EFL students' challenges in research teaching and writing. *Hungarian Educational Research Journal*, *11*(4), 478–488. https://doi.org/10.1556/063.2021.00047

Haryono, A., & Adam, C. (2021). The implementation of mini-research project to train undergraduate students' scientific writing and communication skills. *JPBI (Jurnal Pendidikan Biologi Indonesia)*, *7*(2), 159–170. https://doi.org/10.22219/jpbi.v7i2.15838

Hendratmoko, A. F., Madlazim, M., Widodo, W., & Sanjaya, I. G. M. (2023). the Impact of Inquiry-Based Online Learning With Virtual Laboratories on Students' Scientific Argumentation Skills. *Turkish Online Journal of Distance Education*, *24*(4), 1–20. https://doi.org/10.17718/tojde.1129263

Khabib, S. (2022). Introducing artificial intelligence (AI)-based digital writing assistants for teachers in writing scientific articles. *Teaching English as a Foreign Language Journal*, *1*(2), 114–124. https://doi.org/10.12928/tefl.v1i2.249

Liang, G., Zhang, Y., Huang, H., & Qiao, Z. (2015). Teacher Incentive Pay Programs in the United States: Union Influence and District Characteristics. *International Journal of Education Policy and Leadership*, *10*(3). https://doi.org/10.22230/ijepl.2015v10n3a491

Lim, K. Y., Lee, H. W., & Grabowski, B. (2009). Does concept-mapping strategy work for everyone? the levels of generativity and learners' self-regulated learning skills. *British Journal of Educational Technology*, *40*(4), 606–618. https://doi.org/10.1111/j.1467-8535.2008.00872.x

Munawaroh, H. S. H., Yuliani, G., & Aisyah, S. (2020). Implementation of Science Writing Heuristic Approach to Develop Chemistry Students' Argumentation Skill. *4th Asian Education Symposium (AES 2019)*, 145–149. https://doi.org/10.2991/assehr.k.200513.033

Nugroho, L., Fajarsari, I. M., Solikin, A., Yusdita, E. E., Fatriansyah, A. I. A., Irwanto, I., Atiningsih, S., Susilawati, N., Gainau, P. C., Hippy, M. Z., Rahmadi, H., Januarsi, Y., & Faisol, I. A. (2023). Metodologi Penelitian Akuntansi dan Praktik Penulisan Artikel Bidang Akuntansi. In N. Rismawati (Ed.), *CV WIDINA MEDIA UTAMA*. CV WIDINA MEDIA UTAMA.

Nugroho, L., Mor, S., Iskandar, D., Setiany, E., & Asih, D. (2024). The Urgency of Digitalization Vis-a-Vis Business Trends (Indonesia Case). *The First International Annual Conference on Economics, Management, Business and Accounting*, 1–13.

Nurdany, A., Nugroho, L., Shahirah, N. A., Nikamtuzzahra, Musyarofah, A. N., Bandiyah, A. N., Ali, J., Kurnia, R., Nafisa, A., & Putri, A. Z. (2024). DIGITAL ECONOMY DISRUPTION (Unveiling the Dynamic View of Islamic Finance, Digital Asset, Financial Crime and Cybersecurity). In *Widina Media Utama*. Widina Media Utama.

Oktris, L., Tarmidi, D., Nugroho, L., Anasta, L., & Fadjareni, A. (2022). *Tips & Trik Cara Praktis Menyusun Skripsi dan Tesis* (Pertama). Pustaka Pranala.

Omizo, R., & Hart-Davidson, W. (2015). Finding genre signals in academic writing. *Journal of Writing Research*, *7*(3), 485–509. https://doi.org/10.17239/jowr-2016.07.03.08

Prahmana, R. C. I. (2017). The Role of Research-Based Learning to Enhance Students' Research and Academic Writing Skills. *Journal of Education and Learning*

(EduLearn), *11*(3), 351–366. https://doi.org/10.11591/edulearn.v11i3.5871

Prastiwi, L. F., Sumarsono, H., Mukhlis, I., & Annisya', A. (2022). Training of scholarly article writing using quantitative methods for teacher competency development. *Abdimas: Jurnal Pengabdian Masyarakat Universitas Merdeka Malang*, *7*(4), 824–834. https://doi.org/10.26905/abdimas.v7i4.7737

Putri, M. D., & Rusdiana, D. (2017). Identifying Students' Scientific Argumentation Skill At Junior High School 1 Argamakmur, North Bengkulu. *IJAEDU-International E-Journal of Advances in Education*, *III*(9), 556–572. https://doi.org/10.18768/ijaedu.370424

Rahman, M. T., & Maskuriah, U. (2016). *Kemampuan Guru Dalam Menulis Masih Rendah*. Kalsel.Antaranews.Com. https://kalsel.antaranews.com/berita/40944/kemampuan-guru-dalam-menulis-masih-rendah

Rustam, R., & Priyanto, P. (2022). Critical thinking assessment in the teaching of writing Indonesian scientific texts in high school. *Jurnal Penelitian Dan Evaluasi Pendidikan*, *26*(1), 12–25. https://doi.org/10.21831/pep.v26i1.36241

Sari, Y. A., Suhono, Anggaira, A. S., Smita, M. K., Dewi, N. A. K., & Qoni'ah, U. (2022). An Assistance of Academic Writing and the Utilization of Online Libraries for Teachers at SMP Negeri 4 Metro City. *Bulletin of Community Engagement*, *2*(1), 11–20.

Satriya, M. A., & Atun, S. (2024). The Effect of Argument Driven Inquiry Learning Models on Scientific Argumentation Skills and Higher Order Students on The Topics of Acid Base. *Jurnal Penelitian Pendidikan IPA*, *10*(5), 2663–2673. https://doi.org/10.29303/jppipa.v10i5.6834

Susetyarini, E., Rofieq, A., Latifa, R., Nurtjahyani, S. D., & Nurrohman, E. (2023). Analysis of Experience and Knowledge Competencies of Teacher Scientific Performance in Batu City Middle Schools. *Jurnal Penelitian Pendidikan IPA*, *9*(10), 9006–9012. https://doi.org/10.29303/jppipa.v9i10.2983

Utami, W., Nugroho, L., & Farida. (2017). Fundamental Versus Technical Analysis of Investment: Case Study of Investors Decision in Indonesia Stock Exchange. *The Journal of Internet Banking and Commerce*, *22*(8), 1–18. http://www.icommercecentral.com/open-access/fundamental-versus-technical-analysis-of-investment-case-study-of-investors-decision-in-indonesia-stock-exchange.php?aid=86055

Widodo, Z. D., Agustini, I. G. A. A., Utama, A. M., Santosa, S., Novianti, R., Anggraini, R. I., Bangun, R., Pramanik, P. D., Permata, D., Ahdiyat, M., Dudija, N., Wijiharta, W., & Nugroho, L. (2023). MANAJEMEN TALENTA. In Z. D. Widodo (Ed.), *CV WIDINA MEDIA UTAMA*. CV WIDINA MEDIA UTAMA.