

## ONLINE LEARNING ON ACADEMIC WRITING: IMPLEMENTING THE AUTHENTIC LEARNING APPROACH

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### Abstract

Academic writing skills are essential competencies for students to support academic success and scholarly publication; however, many students still experience difficulties in producing publishable academic writing. The aims of this study are to explore the use of an authentic learning approach as a learning strategy that can assist the students to academic writing assignments properly. This study implements descriptive analytical approach through systematic observation of variables. Thirty students who enrolled in the academic writing course of Universitas Terbuka (UT) were involved as respondents in this present study. The participants had to follow the systematic online learning sessions of the academic writing course. After completing the academic writing course, the participants must be able to write a proper academic article published in the related journal. The academic writing online course was designed and developed with the following nine principles of authentic learning principles such as authentic context, authentic tasks and activities, access to expert performances, multiple roles and perspectives, supporting collaborative construction of knowledge, promoting reflection and articulation, providing coaching and scaffolding, and assessing the students' writing assignment. The results of the study indicated that there were gained score of students after completing the authentic learning based academic writing courses. The result of the study recommends that the use of authentic learning approach is important in academic writing course due to provision of real learning experiences for students to complete the academic writing assignments.

**Keywords:** Academic Writing, Authentic Learning, Online Learning.



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## INTRODUCTION

Many higher education institutions have recently adopted online learning as a method of course delivery. In order to facilitate students' study, Universitas Terbuka (UT) employs an online mode (Dhawan, 2020; Addae et al., 2025). Online tutorial programs are offered to facilitate the students' attainment of the predetermined learning competencies (Afifah et al., 2025). The academic writing course was one of the courses that offered an online tutorial program to help the students attain academic writing

skills (Zhu et al., 2025). Students need academic writing skills because many of them encounter challenges and obstacles when producing academic papers (Hong & Shin, 2025; Niekerk et al., 2025). In this regard, it has been observed that one of the most unsettling experiences for university students is the demanding process of preparing and submitting written assignments under tight deadlines. Many students struggle to determine what to write and how to construct a proper academic paper. Producing an academic text requires not only comprehension of the subject matter, but also the writing skills needed to present it effectively.

Academic writing serves as the primary medium through which scholarly work is communicated (Xu et al., 2025). It helps document and communicate ideas, activities, and findings to others (Ilhami et al., 2025; Sugebo et al., 2025). Good writing can be beneficial to scientists in several ways. In addition, Prayag also stated the indicators of good academic writing, which include (1) clear and effective, (2) simple, (3) objectivity, (4) brief, (5) hedging, and (6) precision. Writing an academic article requires real experience and continuous practice (Suryani et al., 2024). To write proper academic papers, students must be actively involved in authentic learning activities (Taye & Mengesha, 2024). At Universitas Terbuka (UT), academic writing is a compulsory course for all study programs, and students are required to submit an academic paper as one of the graduation requirements (Ramadhan et al., 2024; Alzahrani, 2025). However, many students struggle with academic writing, prompting the need for an effective instructional approach that meaningfully supports their learning process (Skill et al., 2024).

One approach that can address these difficulties is experiential learning. This method allows students to engage directly in authentic writing tasks and real-world academic activities, helping them develop the skills needed to complete their assignments effectively. Accordingly, this study examines the use of authentic learning to support students' academic writing development and focuses on two research questions: (1) whether the approach contributes to students' progress in writing academic papers, and (2) how it can be effectively implemented in the learning process. Academic writing refers to formal written work produced in academic settings (Valdes, 2019). Oshima and Hogue (2017) describe it as the type of writing used in high school and university contexts, differing from creative writing because its purpose is to inform, analyze, and persuade. Valdes (2019) identifies several forms of academic writing such as literary analyses, research papers, dissertations and emphasizes its impersonal and formal tone. Academic writing requires a logical structure, typically consisting of an introduction, body paragraphs, and a conclusion, each serving to present background information, support the thesis, and summarize key findings. Every sentence must coherently contribute to the overall argument (Nehru et al., 2024). Strong academic writing also requires well-supported claims. Arguments must be backed by credible evidence from scholarly sources, and writers must remain objective by avoiding emotional or biased language. Because these competencies develop through consistent practice and real engagement with writing tasks, an authentic learning approach is essential for helping students master academic writing.

Authentic learning is a pedagogical approach that encourages students to explore, discuss, and construct understanding through meaningful engagement with real-world problems (Firman et al., 2025). It typically involves role-playing, problem-based activities, case studies, and participation in communities of practice (Benítez-Chavira et al., 2025). Authentic learning places students at the center of relevant tasks that stimulate inquiry and interdisciplinary thinking, while also connecting classroom activities to real contexts. Students work on complex assignments that require higher-order thinking—analyzing, designing, manipulating, and evaluating information and produce outputs that can be shared with audiences beyond the classroom. Collaboration with peers, instructors, parents, and external experts becomes integral, supported by scaffolding and opportunities for meaningful social interaction.

In addition to these characteristics, (Yeomans et al., 2025) outlines several essential criteria for authentic learning assignments. Such assignments must be realistic, require judgment and innovation, and encourage students to actively “do” the subject rather than simply recall information. They should also replicate or simulate the kinds of tasks and challenges adults face in professional, civic, or personal settings. Authentic assignments assess students' ability to efficiently and effectively apply a repertoire of knowledge and skills to solve complex problems. Moreover, they must provide adequate opportunities for learners to rehearse, practice, consult resources, receive feedback, and refine their performances and products. These characteristics ensure that authentic learning experiences not only build academic competence but also prepare students for real-world demands.

The authentic learning approach consists of key principles: (1) offering a real-world context that reflects how knowledge is applied in practice, (2) designing genuine tasks and activities, (3) providing opportunities for learners to observe expert performance, (4) exposing learners to multiple roles and

perspectives, (5) facilitating the collaborative construction of knowledge, (6) encouraging reflection to support the development of abstract understanding, (7) promoting articulation so that tacit knowledge becomes explicit, (8) delivering coaching and scaffolding throughout the learning process, and (9) implementing authentic assessment to meaningfully evaluate learning outcomes (Yang & Miang Goh, 2022).

Many educational institutions around the globe have implemented online learning. This modern instructional approach offers a range of advantages for both educators and students (Joo & Belcher, 2025). Online learning is defined from many perspectives. Online learning is defined as a new domain of learning that combines distance education with the practice of face-to-face instruction utilizing computer-mediated communication (Mehrvarz et al., 2025; Vaszkun & Mihalkov Szakács, 2025) noted that online learning refers to instructional environments supported over the internet. Online learning comprises a wide variety of programs that use the internet within and beyond school walls to provide access to instructional materials as well as facilitate interaction among teachers and students. Online learning, as a new mode of instruction, offers several advantages that support effective learning. (Lokare & Jadhav, 2024) emphasize its accessibility, personalized learning opportunities, and potential to develop students' cognitive abilities. It is also cost-effective, encourages research, strengthens basic computer skills, promotes equal learning opportunities, allows self-paced study, and connects learners globally. These strengths show that online learning can broaden educational access while meeting diverse learner needs.

However, online learning also poses challenges. According to Christianson & Lindqvist, (2025) poor communication, feelings of isolation, low motivation, inconsistent instructional quality, and limited access in remote areas can reduce its effectiveness. Overcoming these issues requires careful program design and integration of all key components teachers, curriculum, students, methods, media, and supporting facilities to ensure optimal learning outcomes. Students benefit from online learning when strong interaction and collaboration are fostered. (Eskiyurt & Özkan, 2024) note that connectivity among learners helps reduce dropout rates, improves performance and satisfaction, and enables mutual support through shared knowledge. Thus, student engagement becomes a critical factor in determining online learning success. Effective instruction must be interactive and generative, engaging learners with resources and prompting them to co-construct understanding (Huang & Macgilchrist, 2024). Media and technology also play a vital role in enhancing engagement. Appropriate selection of instructional media and strategies supports learners in achieving the intended outcomes. (Bueche et al., 2023) highlight that effective online instruction depends on well-designed content, meaningful instructor–learner interaction, and well-prepared instructors. This reinforces the conclusion that teachers remain central to the success of online education.

The study of implementing the authentic learning approach in academic writing skills is considered as relative new. The previous studies of using the authentic learning approach were focused on retention of knowledge and academic achievement on social studies (Yildirim & Ortak, 2021). Other studies of using the authentic learning approach were conducted on various fields and subjects. Todd et al., (2025) conducted a study of authentic learning for soft skills development and environmental sustainability. Suhatri et al., (2025) did a study of Development of science learning e-module by using authentic learning experience model for the seventh graders. The study of using the experience-based learning approach must be up-scaled to solve the learning problems on academic writing.

## RESEARCH METHOD

This study was conducted in the Educational Technology Program at Universitas Terbuka, Indonesia, during the first semester of the 2024/2025 academic year, within the fully online Academic Writing course delivered through the institution's tutorial system. Employing a descriptive–analytical design, the research aimed to investigate students' engagement in authentic learning activities and their academic writing performance. The participants consisted of 30 students from two independent online classes, selected using a total sampling technique because all enrolled students met the inclusion criteria and actively participated in the course. Data collection employed three instruments: an observation checklist, a questionnaire, and an authentic assessment rubric used to evaluate nine components of academic writing (e.g., introduction, literature review, methodology, findings and discussion, and references). Students completed a series of writing tasks submitted across instructional sessions, and each submission received targeted feedback aligned with standardized criteria for academic writing, consistent with the authentic learning approach implemented in the course. The data were analyzed using descriptive statistics to summarize students' motivation and learning outcomes. Subsequently, differences in learning

achievement between the two independent classes were tested using the Mann–Whitney U nonparametric test, selected because rubric-based scores were ordinal, sample sizes were relatively small, and the independent-group design did not satisfy the assumptions for parametric analyses.

Table 1 presents the academic writing standards used as the reference framework for evaluating students’ performance in the authentic assessment process. These standards outline the essential components and quality indicators of scholarly writing that guided both the instructional activities and the scoring procedures throughout the course.

Table 1. The Academic Writing Standard

Standard	Components
Problem Definition and Methodology	<ul style="list-style-type: none"> <li>• Statement of the research problem, the aims of the paper, and the significance of the research. Explanation of the scope of the study.</li> <li>• Use of a research methodology appropriate to the task.</li> <li>• A discerning selection of the relevant, current, and seminal law (legislation, cases, main texts, and journal articles)</li> <li>• Analysis of the research sources used to address the research problem.</li> </ul>
Analysis and Argumentation	<ul style="list-style-type: none"> <li>• Discussion of implications of the analysis and its relationship to the research problem.</li> <li>• Use of logical argument.</li> <li>• Suggestions for law reform, directions of future research, or other avenues to promote resolution of the issues (as appropriate to the specific task).</li> </ul>
Structure and Writing	<ul style="list-style-type: none"> <li>• Analysis of the research sources used to address the research problem.</li> <li>• Discussion of implications of the analysis and its relationship to the research problem.</li> <li>• Use of logical argument.</li> <li>• Suggestions for law reform, directions of future research, or other avenues to promote resolution of the issues (as appropriate to the specific task).</li> <li>• Good overall presentation of the paper as appropriate to the task.</li> </ul>
Presentation and Referencing	<ul style="list-style-type: none"> <li>• Appropriate pagination, layout, margins, typographical accuracy, consistent and appropriate citation style, use of headings, etc.</li> <li>• Correct attribution of sources through citations.</li> <li>• References are listed in the bibliography</li> </ul>

Source: [https://www.monash.edu/\\_data/assets/pdf\\_file/0006/296025/Assessment-criteria-for-Masters-research-paper.pdf](https://www.monash.edu/_data/assets/pdf_file/0006/296025/Assessment-criteria-for-Masters-research-paper.pdf)

Furthermore, the questionnaires served to capture students’ motivation for engaging in authentic learning activities. The items were systematically constructed with reference to the core components of authentic learning, as outlined in Table 2.

Table 2. Components of Authentic Learning

Components	Descriptions
Real-life relevance	Activities and tasks that represent those of a professional as closely as possible
An ill-defined problem	Challenges that are not easily solvable or don’t have an obvious answer. There may be layers of tasks that need to be completed to solve the problem.
Sustained investigation	Projects and tasks that require a significant investment of time and cannot be solved in a matter of minutes or hours.

Components	Descriptions
Multiple sources and perspectives	Resources may be theoretical or practical and may require learners to distinguish useful information from irrelevant information.
Collaboration	Individuals cannot achieve success alone. Projects and tasks will require social connections.
Reflection	Learners will reflect on their learning, make choices, and set targets accordingly.
An interdisciplinary perspective	Projects are not limited to a single subject or set of knowledge, but will make use of knowledge and skills from across subjects.
Integrated assessment	Formative assessment is woven seamlessly into tasks and activities and used purposefully by learners and teachers alike.
Polished products	Activities and tasks will lead to the creation of the products
Multiple interpretations and outcomes	There are many possible solutions and answers to the problem

### RESULTS AND DISCUSSION

The results of the study indicated that implementing the authentic learning approach in academic writing courses facilitated the students in achieving the ability to write a proper academic paper. At the end of the study, 28 participants, out of 30, submitted their final assignments that achieved the indicators of the rubric of academic writing standard, which includes problem definition and methodology, analysis and argumentation, structure and writing, and presentation and referencing. Formative assessment that was integrated in the course enables the participants to get constructive feedback to improve their assignments in writing the essential components of the academic article introduction, literature review, research method, research findings and discussion, summary and recommendation, references, and abstract. The participants engaged actively to learn the scaffolding presented content of the online academic writing course.

The course content that is presented with a scaffolding learning strategy or step-by-step requires the students to study the course substance systematically and thoroughly. The data were collected after participants completed learning sessions. The participants were provided with specific writing assignments that must be submitted in the next learning session of the course. Constructive feedback on the students' specific writing assignment was provided to evaluate students' work on the components of the academic article. The students have revised their work based on the given constructive feedback from the tutor. The final work of the students' assignment was graded 1 – 100 scale. The following table depicts the average of participants' learning achievement represented by mean scores of their writing assignments on the components of the academic article.

Table 3. Students' average scores of the academic article components

Components or Part of An Academic Article	Min Score	Median	Mean	Max
Abstract	51	68	74	86
Introduction	48	65	70	85
Literature review	65	70	72	90
Research method	63	69	72	88
Findings and discussions	58	66	70	86
Summary and recommendations	54	68	72	87
References	56	70	74	90

After completing the academic writing course, the students showed significant competencies in writing academic articles based on providing writing assignments provided. The students were able to finalize their academic article that can be published in the national journal. In addition, the students showed high learning motivation to study academic writing, which implemented the authentic learning approach. The following table indicates students' learning motivation in studying an academic writing course that implements the authentic learning approach.

Table 4. Students' learning motivation in authentic learning

Statements of Components of the Authentic Learning Approach	Min Scale	Median	Mean	Max
An authentic learning approach to writing assignments relevant to my learning needs.	3	4	4.42	5
Academic writing challenges me to write a good academic article.	3	4	4.38	5
Providing assignments gives a chance for students to elaborate on the course content.	2	4	4.15	5
The academic writing course provides me with chances to explore other academic resources.	3	4	4.40	5
The academic writing course provides me with chances to collaborate with other students.	3	4	4.35	5
The academic writing course provides me with chances to review my assignments.	3	4	4.48	5
Academic writing courses provide chances to use interdisciplinary perspectives.	2	4	4.10	5
The use of formative assessment enables me to revise and improve my writing assignments.	3	4	4.50	5
The academic writing course enables me to polish my writing assignment.	3	4	4.46	5
The academic writing course enables me to analyze my article with many possible solutions.	3	4	4.41	5

To analyze the difference in learning achievement, the Mann–Whitney U test was employed because the two groups were derived from non-normally distributed data. Table 5 shows that Class 1 had a mean rank of 10.77 with a sum of ranks of 161.50, whereas Class 2 had a higher mean rank of 20.23 with a sum of ranks of 303.50. These findings indicate that the students' learning achievement scores in Class 2 were ranked higher than those in Class 1, suggesting that Class 2 tended to demonstrate better learning outcomes.

Table 5. Results of the Mann–Whitney U Test

Group	N	Mean Rank	Sum of Ranks
Class 1	15	10.77	161.50
Class 2	15	20.23	303.50

Statistically, there was a significant difference in learning achievement between Class 1 and Class 2. This is demonstrated in Table 6 through the results of the Mann–Whitney U test, where the values obtained were Mann–Whitney U = 41.500, Z = -3.327, and an Asymp. Sig. (2-tailed) of .001, which is far below the significance threshold of 0.05. This significance level confirms that the difference in score distribution between the two classes did not occur by chance. Therefore, it can be concluded that the learning achievement of students in Class 2 was significantly higher than that of students in Class 1.

Table 6. Statistical Test Results

Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)	Exact Sig. [2*(1-tailed Sig.)]
41.500	161.500	-3.327	.001	.002 <sup>b</sup>

The results of this study clearly demonstrate that the authentic learning approach is effective in enhancing students' academic writing skills, particularly in producing a complete and well-structured academic paper. The fact that 28 out of 30 participants successfully met the rubric indicators covering problem definition, methodology, analysis and argumentation, structure and writing, as well as presentation and referencing suggests that authentic learning provides a meaningful context that mirrors real academic writing practices. These findings reinforce previous studies (Dabney & Eid, 2024; Yeflach-

Wishkerman, 2024) which emphasize that authentic tasks help learners develop higher-order cognitive skills by situating learning in real-world contexts. However, while prior research mainly focused on authentic learning in general instructional settings, this study offers empirical evidence specific to *online academic writing*, an area that has been less explored (Yu, 2023).

The integration of formative assessment throughout the course also played a pivotal role in students' progress. Earlier research (Demekash et al., 2024; Shao et al., 2024) has long established that timely and constructive feedback significantly enhances learning outcomes. In this study, such feedback enabled students to iteratively revise their work and progressively refine each component of their academic article from introduction and literature review to methods, findings, and conclusion. What distinguishes the present study is the systematic combination of authentic learning with continuous formative assessment in a fully online learning environment, demonstrating how these two strategies can mutually reinforce each other to support complex academic writing skills (Rini et al., 2023).

Students' active engagement throughout the scaffolded learning process further highlights the importance of instructional design in supporting novice academic writers. Scaffolding strategies have been acknowledged in prior literature (Wang et al., 2024; Zhu et al., 2024) as effective mechanisms for guiding learners from basic understanding to independent performance. In this study, providing step-by-step learning materials and targeted writing tasks allowed students to gradually internalize the logic and structure of academic writing (Iqbal et al., 2023; Oyake et al., 2024). Unlike previous studies that examined scaffolding as a standalone technique, this research demonstrates its effectiveness specifically when integrated with authentic learning tasks and individualized formative feedback.

The data collected after each learning cycle underline the value of requiring students to produce written work immediately after engaging with course content. This aligns with established findings that active knowledge production accelerates skill development (Ebrahimi, 2024; Goshu & Gebremariam, 2024). Yet, the present study offers new insight by showing that such active production when systematically paired with recurring feedback leads to measurable improvements in students' ability to analyze, argue, cite, and structure an academic paper at a near-professional level. The findings imply that the consistently high final scores across all components of academic writing indicate the potential of integrating authentic learning, scaffolding, and formative assessment as an effective instructional model for online higher education (Al-Momani et al., 2024). This model can serve as a robust framework for designing academic writing courses, enabling educators to systematically support students' development of complex writing skills in digital learning environments.

The analysis of students' engagement in an authentic-based online academic writing course indicated that most of the students were enthusiastic and enjoyed the entire learning process of writing academic articles. They were actively involved in the key elements of authentic learning, including real experience, reflective observation, abstract conceptualization, and active experimentation. The findings suggest that online academic writing courses should be systematically designed based on authentic learning principles by incorporating real academic tasks supported by continuous coaching, scaffolding, and constructive feedback to improve students' writing quality.

## CONCLUSION

The findings of this study confirm that the integration of an authentic learning approach, supported by scaffolding process and formative feedback, were effective in developing the students' competencies in academic writing within an online learning environment. Through step-by-step instructional activities, targeted writing assignments, and continuous constructive feedback, the students were able to progressively enhance the essential components of their assignments on academic articles. The final assessments indicated that the participants of the study successfully attained the academic writing standards that outlined in the rubric. Some of participants were even able to publish their academic articles in national journals. Overall, the study demonstrates that an appropriately designed online academic writing course that implements authentic can foster both the mastery of academic writing skills and strong learning motivation among students.

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### AUTHOR CONTRIBUTIONS

Authors 1 and 2 were responsible for preparing the research article and overseeing the implementation of the study, while Author 3 was responsible for analyzing the research data and entering the data as the corresponding author.

### CONFLICTS OF INTEREST

The author(s) declare no conflict of interest.

### USE OF ARTIFICIAL INTELLIGENCE (AI)-ASSISTED TECHNOLOGY

The authors declare that no artificial intelligence (AI) tools were used in the generation, analysis, or writing of this manuscript. All aspects of the research, including data collection, interpretation, and manuscript preparation, were carried out entirely by the authors without the assistance of AI-based technologies.

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