Indonesian High School Students’ Critical Thinking and Literary Text Comprehension

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Abstract: The study aims to investigate the critical thinking and comprehension of literary texts of high school students in Bandar Lampung. The study was designed in an ex-post de facto setting with critical thinking and academic potential identified through students’ literary text comprehension. Three instruments were used in the study, i.e., an adapted reading, academic potential, and critical thinking assessment, involving tasks on summary, analysis, synthesis, and evaluation. The study reveals a noteworthy impact of explicit critical thinking training on students’ proficiency in literary text reading, alongside a significant interplay between the students’ critical thinking taxonomy and academic potential. The findings suggest the importance of a model for imparting high-order cognitive abilities, such as inferential, analytical, and synthetic skills, and active learning methods through experimentation that can be integrated into Indonesian high schools’ academic curriculums.

INTRODUCTION

Literacy today encompasses not only the ability to read and write but also the possession of critical thinking skills. This competence is highly valued in modern society and is deemed an important factor for success in education and daily life. Nevertheless, certain professionals contend that critical thinking remains overlooked in academic instruction (Basri & As’ari, 2019; Ennis, 2015, 2018; Kuhn, 2019). In many countries, Indonesia included, the educational system often neglects to foster the cultivation of critical thinking abilities during the learning process. Regrettably, students rarely have multiple occasions to refine and apply these proficiencies within the classroom setting.

Recognizing the importance of critical thinking in practical situations, particularly in the context of foreign language education, many educators have investigated the requirement for integrating critical thinking skills into foreign language learning (Kurniawati et al., 2020; Murtadho, 2021; Yuan et al., 2022). Yuretich (2003) proposes that critical thinking entails
educating students with higher-order reasoning skills (HORS), such as summarising, analyzing, synthesizing, and evaluating within the classroom setting. One of the aims of education is to provide students with access to knowledge and equip them with problem-solving skills for real-life scenarios. Yuretich stresses that enabling students to engage in critical thinking is essential for achieving this objective. For instance, providing students with the opportunity to take a moment to reflect, analyze, and discuss issues within a context that values and facilitates critical thinking is the cornerstone of critical thinking education (Yuretich, 2003).

Additionally, Liaw (2007) argues that the acquisition of higher-order thinking skills (HOTS) is paramount for achievement in contemporary knowledge-based societies. EFL teachers have a responsibility to help their students acquire critical thinking skills through pedagogical resources and exercises. EFL students need to refine and strengthen their critical thinking skills in order to excel in their academic pursuits and future careers (Liaw, 2007). In this context, various academics have recognized the essential part that critical thinking plays in the academic achievements of individuals (Alnofaie, 2013; Bagherkazemi & Alemi, 2010; Zangenehvandi et al., 2014).

Reading classes often use different texts as material, which can be classified as literary or non-literary. Well-crafted literary texts, including short stories, poems and prose, can enhance students’ critical thinking in reading class. Using literary texts in EFL classrooms can stimulate students’ critical thinking abilities. Khatib’s research suggests that incorporating literary works into EFL/ESL coursework holds promise for improving the crucial language proficiencies of reading, writing, speaking, and listening (Khatib et al., 2011). Meanwhile, a number of studies contend that utilizing literature as content offers three primary advantages for students: (1) the significance of the author’s choice of form to attain specific communicative objectives, (2) an optimal resource for incorporating the four skills, and (3) the promotion of cross-cultural awareness. Additionally, they asserted that literature utilizes language uniquely, potentially enhancing students’ cultural understanding and inspiring their imaginative work (Ali Mansoor et al., 2023; Hussein et al., 2021; Mart, 2019).

Literary texts often exhibit specific syntactic patterns and stylistic word order inversions, making them an ideal resource for incorporating all four language skills. Zoreda and Vivaldo-Lima (2008) emphasized the significance of culture in language acquisition and suggested utilizing literature to develop language instructors’ cultural, linguistic, and
interpretive competency while simultaneously addressing any negative dispositions towards the target culture in language classrooms.

In simple terms, one of the types of text that is well suited to this category is literary text (Zoreda & Vivaldo-Lima, 2008). The study employed literature texts to assess their impact on students’ academic potential and critical thinking. The text was written objectively with clear and concise language, avoiding subjective evaluations. Abbreviations of technical terms were explained, and academic formatting was adhered to. The information presented a logical flow of ideas with causal connections. Additionally, the language employed was formal and avoided colloquialisms and informal expressions. Precise subject-specific vocabulary was utilized when conveying meaning more accurately than non-technical terms. A logical structure with a causal progression was maintained throughout the text while adhering to conventional academic sections and formatting. Clear, objective language was used, avoiding biased, emotional, figurative, or ornamental language. The passive tone and impersonal construction were employed, avoiding first-person perspectives unless necessary. Consistent high-level language was used with technical terms while avoiding unusual or ambiguous terms. Grammatical correctness was ensured, and common sentence structure was adhered to, with technical term abbreviations explained when first used. Quotations were clearly marked, and filler words were avoided. Lastly, positions on subjects were made clear through hedging, and bias was avoided.

Finally, the text was grammatically correct and adhered to a consistent style of citation and footnoting, following the style guide. Zoreda and Vivaldo-Lima (2008) recommend using literature modules in language learning to improve English reading skills and introduce elements of British culture. Building on the benefits of using literature in EFL classrooms, experts stress that it helps language teachers improve their cultural, linguistic and interpretive competence while at the same time helping students overcome possible negative assumptions about the targeted culture in the language learning setting (Domínguez Romero et al., 2018; Hamimed, 2021; Khany & Kamalvand, 2022; Lin, 2019; Rianto, 2022).

This research aims to investigate whether critical thinking skills positively impact students’ comprehension of literary texts and whether there is a statistical correlation between the level of critical thinking, academic potential, and reading ability among EFL students. The study explores the contribution of higher-order thought processes (HOTS) to the learning process and advancement of literary text comprehension. The study structure follows conventional academic sections and consistent author and institution formatting. The
The language used is clear, objective, and value-neutral, avoiding biased or ornamental language. The text employs a formal register and adheres to precise technical terms. The writing is grammatically correct and free from any spelling or punctuation errors. Academic capability must be considered vital when devising reading courses that aim to enhance critical capabilities and reading comprehension. Research indicates a teaching framework for developing higher-order thinking abilities, such as inference, analysis, and synthesis, and fostering active strategic learning through experiment participation. This model could potentially improve the quality of education in Indonesian high schools and similar institutions, enabling students to compete in an ever more globalized world. Objective evaluations will be prioritized, and technical term abbreviations will be explained upon first use. Following conventional academic structures and formal registers, the language will remain clear, concise, and value-neutral. Accurate word choice and grammatical correctness will be prioritized, avoiding filler words and inappropriate bias. Causal connections between statements will be included to ensure a logical flow of information. Consistent citation and footnote styles conforming to style guides will be implemented.

**LITERATURE REVIEW**

Critical thinking has been defined by theorists and educators in various ways throughout the years, with the definition evolving over time. The ensuing explanations illustrate the concept - it refers to the ability to scrutinize facts, generate and organize ideas, defend opinions, make comparisons, draw conclusions, evaluate arguments, and solve problems (Lai, 2011). Critical thinking requires adequate evidence to support one’s beliefs. It requires a reluctance to be swayed unless evidence is explicitly offered. It is the use of analytical thinking to evaluate and make sense of what has been learned (Mulnix, 2012). Comprehending and assessing arguments is an active and methodical process. Objectivity is maintained through clear, objective, value-neutral language, avoiding first-person perspectives, biased or emotional phrases, and figurative language. The language is kept formal, and hedging is used to make positions clear on the subject. An assertion, presenting an argument about an object’s properties or the relationship between two or more objects, is supported or refuted by evidence. Establishing a logical flow of information with causal connections between statements is essential. Technical term abbreviations are explained at their first use, and unnecessary ornamental language is avoided. Common academic sections
with regular author and institution formatting are included, maintaining factual, unambiguous titles. Finally, impeccable grammar and accurate spelling are maintained, adhering to consistent citation and footnote styles and avoiding filler words (Ennis, 2015; Huit, 1998; Magno, 2010). The text presents critical thinking as a rigorous method of appraising and deciphering data from various sources, such as observation, experience, contemplation, logic, and communication. According to Ennis (2015), critical thinking is an introspective and rational evaluation focused on reaching informed conclusions regarding what to accept or act upon.

In educational materials, definitions often refer to Bloom’s taxonomy, which employs higher-level thinking skills to connect critical and creative thinking. Critical thinking encompasses logical reasoning, while creative thinking involves producing original ideas. Despite the left-brain/right-brain characterization of critical and creative thinking, both entail a thinking process. When examining higher-order cognitive abilities, we focus on the uppermost three levels of Bloom’s taxonomy: analysis, synthesis, and evaluation. Our approach is objective, employing causal connections between statements and clear language that follows the conventional academic structure. Technical term abbreviations are explained upon the first usage, while sentence and paragraph structure ensure the logical progression of information. The language is formal and value-neutral, avoiding biased or ornamental language, first-person perspectives, and filler words. Spelling follows British English standards, eliminating grammar and punctuation errors (Qasrawi & Abdelrahman, 2020; Rahman & Manaf, 2017; Sagala & Andriani, 2019). Evaluation is equated with critical thinking by Huit, while creative thinking is associated with synthesis. These two forms of mental processing, which share certain similarities, serve distinct objectives and correspond to the initial four tiers of Bloom’s hierarchy. Assessment entails scrutinizing a statement or proposition on the basis of examination, while integration necessitates the fusion of elements and connections in an innovative and unprecedented manner.

Critical thinking involves individuals taking responsibility for their own thinking and setting high standards for evaluating and analyzing their thoughts. The primary goal of critical thinking is to achieve understanding, appraise various viewpoints, and resolve issues (Duron et al., 2006; Facione, 2011; Stobaugh, 2013; Walsh & Paul, 1986). Critical thinking entails drawing inferences from factual statements, identifying assumptions, determining whether conclusions are justified, appraising the relevance of conclusions to given statements, and assessing arguments. In more complex phrasing, Bassham et al. (2010) define
“critical thinking” as a blanket term encompassing numerous cognitive abilities and intellectual tendencies required for proficient identification, analysis and evaluation of arguments and truth claims (Bassham et al., 2010). It also involves overcoming personal beliefs and prejudices, offering persuasive reasons to support conclusions, and making logical, informed determinations about what to believe and what to do. Teaching the theory of critical thinking to students may only scratch the surface, prompting educators to provide courses wherein students can actively engage in critical thinking. In this context, critical thinking defines the activity of distinguishing between facts, theory, opinion, and belief when reading.

Critical thinking is a crucial element of education, and students need to gain competence in this area. It becomes even more important as students progress to higher education programs, as they bear the responsibility for their own learning. Independent learning is a pivotal aspect, and students need training to develop these skills, which can lead to a transformative change in their thinking patterns. Critical thinking is only possible when students consciously and deliberately engage with the logic of their discipline (Elder & Paul, 2010; Paul & Elder, 2007; Paul, 2014). Therefore, formal instruction on critical thinking skills is necessary.

Several studies provide numerous examples from various disciplines to argue that students can enhance their thinking abilities (Butler, 2012; Halpern & Dunn, 2021). To this aim, a four-part model is proposed for the explicit instruction of critical thinking. The first part emphasizes the disposition for critical thinking, highlighting that conveying critical thinking skills to university students is ineffective without their proper utilization. Therefore, students should either possess or acquire a disposition for critical thinking. Additionally, instruction in critical thinking skills is deemed to be crucial. Additionally, instruction in critical thinking skills is deemed to be crucial. The second part of the model deals with teaching critical thinking skills. The third part is structured training. Structured training can heighten students’ ability to identify when a specific thinking skill is required in novel circumstances. The fourth aspect is metacognitive monitoring, which involves understanding our cognitive processes.

Metacognitive monitoring enables us to evaluate how to use our current knowledge to steer and advance our thinking and learning methods. In the pursuit of critical thinking, students must objectively monitor their thinking process, ensure progress is aligned with a
defined objective, verify the accuracy of their work, and make decisions concerning allocating their time and intellectual resources. Maintaining a clear and logical structure to the process is important, ensuring that all steps are logically connected. The language used should be clear, formal, and neutral, avoiding ornamental language and colloquialisms. Technical terms should be introduced with an explanation and used consistently throughout the text. Following a conventional structure, the author’s name and institution should be included, with factual and unambiguous titles. Citations and footnotes should be clearly marked and consistent with the chosen style guide. Finally, the text should be grammatically correct and free of spelling and punctuation errors.

There are two approaches to encouraging critical thinking in students (Schafersman, 1991). The initial method entails minor alterations to one’s teaching and evaluation practices, while the subsequent method necessitates more elaborate teaching procedures, like Socratic questioning or problem-based learning, which can significantly foster critical thinking habits among students. This process can be achieved through various learning activities, including lectures, laboratory experiments, homework assignments, numerical exercises, research papers, and examinations. The second approach utilizes formal exercises, programs and materials for critical thinking developed by experts and can be easily acquired and employed by teachers (Fahim & Pezeshki, 2012; Rezaei et al., 2011; Schafersman, 1991).

Reading classes have traditionally provided the opportunity for students to increase their vocabulary. These sessions generally stress the quantity of information contained in texts while endorsing the prescribed notions. The class materials primarily consist of biographical accounts, scientific articles, and passages that are not potent enough to encourage critical thinking. The reading exercises are often composed of multiple-choice questions devised to appraise the students’ comprehension. In order to improve conventional approaches in reading comprehension lessons and introduce crucial thinking elements, two aspects must be considered: the process (how) and the content (what).

In terms of the process, students require instruction and motivation to explore intricacies beyond the superficial meaning that authors skilfully embed within their writing. They should recognize that significance extends beyond the bare facts explicitly outlined in the presented excerpt. Readers gain knowledge by learning the statements contained within a text. However, astute readers take this a step further. They may ask questions such as whether examples are presented, an argument is made, sympathy is encouraged, or a contrasting point is used to explain the subject matter. Afterward, they form an understanding of the text’s
meaning as a whole, which is based on their preceding analysis. Critical readers not only assess the language clarity of the text but also how the text depicts the matter at hand. Firstly, they recognize what the text conveys, and then they analyze the text’s purpose. Critical readers not only assess the language clarity of the text but also how the text depicts the matter at hand (Bassham et al., 2010; Facione, 2011; Fahim & Pezeshki, 2012; Paul, 2014; Sagala & Andriani, 2019).

In addition, readers with a critical eye recognize that every writer produces original content. In order to appropriately analyze written material, critical readers strive to differentiate between factual information, theoretical concepts, opinions and beliefs. In this regard, Starkey provides clarification of the differences between facts and opinions. Thus, conscientious readers should consider Starkey’s analysis (Brown & Starkey, 2000; Starkey, 2012). What is the theme of the passage? What issues are under discussion? What conclusions does the passage draw? What evidence does the passage present? Is the author giving factual information, or is he relying on a theory or a belief? Are emotive words avoided?

To cultivate critical reading skills, students must focus on key areas of a written text while keeping other knowledge in mind. Critical reading involves the careful analysis, evaluation, reflection, and synthesis of information, often requiring a slower reading pace than reading for leisure or general information. The study’s teaching model was derived from Jun Xu’s (2011) approach, which consists of five stages: pre-reading to introduce cultural or contextual knowledge, understanding the text and identifying the primary idea of each paragraph, analysis of the logical structure, assessment of logical coherence, and ultimately, writing (Xu, 2011). One effective approach to engaging students in critical thinking is using materials or texts provided by instructors.

**METHODS**

This research adopts a non-experimental ex-post de facto design with two independent variables: the measurement of critical thinking and the academic potential test. The dependent variable is the competence in reading literary text. Information is clear, concise and logically structured, with causal connections between statements and technical terms adequately explained. The text remains objective, avoiding any subjective evaluations. The language is free from biased, emotional, figurative, and ornamental elements, using a neutral
tone and impersonal construction and adhering to high-level standard language. The document follows conventional academic formatting, including standard sections, and maintains consistent formatting features while adhering to British spelling and vocabulary. The document is grammatically correct, employs precise word choice, and avoids bias and informal expressions.

This non-experimental study aims to investigate how high school students’ reading proficiency in literary texts in Bandar Lampung is affected by critical thinking ability and academic potential. The investigation focuses on exploring the influence of these two factors. Purposive random sampling was used for the research to sample the student population of eleventh-grade classes at SMA in Bandar Lampung. Three tools were utilized in this research: a Reading Assessment, an Academic Aptitude Test, and questionnaires assessing critical thinking that were adapted from Zhou Jie (Zhou et al., 2015). The questionnaires comprised 20 items that required participants to perform summarising, analyzing, synthesizing, and evaluating tasks. Any technical term abbreviations are defined upon first use, and the text adheres to traditional academic structure and language principles.

FINDINGS

The student’s progress is determined by subtracting their post-test scores from their pre-test scores. The table below summarises the descriptive statistics of this progress, which is used as a measurement. This measurement is based on the student’s progress. Our aim, with regard to our second research query, was to examine whether students’ academic capacity interacts with their critical thinking abilities and literary comprehension. The progress of students forms the basis of the latter’s measurement. Tables summarising univariate analysis across variables are presented below.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
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<th>F</th>
<th>Sig.</th>
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<td>8</td>
<td>97.227</td>
<td>1.840</td>
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<tr>
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<td>22770.936</td>
<td>430.861</td>
<td>.000</td>
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<tr>
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<td>289.753</td>
<td>5.483</td>
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</tr>
<tr>
<td>TPA</td>
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<td>2</td>
<td>25.057</td>
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<td>.626</td>
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<td>Crthnk * TPA</td>
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<td>4</td>
<td>93.834</td>
<td>1.775</td>
<td>.151</td>
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<td>52.850</td>
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<tr>
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<td></td>
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<tr>
<td>Corrected Total</td>
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<td>51</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Dependent variable: gain

Table 1 demonstrates a substantial association between the critical thinking group and the increase in students’ literacy skills, confirmed by the F-value of 5.48. This factor is statistically notable at a level of 0.05. In contrast, the table reveals that academic potential had no significant impact on the students’ literary comprehension ability. Overall, there was a significant relationship amongst variables of academic ability, critical thinking category, and literary text reading ability, with a significant F value of 430.861 at the 0.005 level. The figure below shows a post hoc examination of the impact of the critical thinking category on students’ literary text reading ability.

![Estimated Marginal Means of gain](image)

Note: 1 = high    2 = mid    3 = low

**Figure 1.** Estimated marginal mean of gain on students’ critical thinking

Figure 1 shows that students with moderate critical thinking made the greatest improvement in reading literary text, while those with high critical thinking made the least improvement. Notably, the effect of academic capability on students’ reading literary text ability has been examined through a Post hoc analysis, as demonstrated in Figure 2. The figure demonstrates that students with greater academic potential, both high and low,
experienced the greatest gain in their ability to read literary text. On the other hand, those with average academic potential showed the smallest gain in their reading proficiency.

The study results indicate that practicing critical thinking enhances students’ literary text reading skills. This finding aligns with Kamali and Fahim’s (2011) research on the “Connection between Critical Thinking Ability of Iranian EFL Learners and their Resilience Level when Confronted with Unfamiliar Vocabulary Items while Reading.” Their results demonstrate that students’ critical thinking abilities greatly influence their resilience in handling difficult vocabulary (Kamali & Fahim, 2011). The investigation indicated that the critical thinking proficiency of students distinctly impacted their capacity to comprehend a written text that is unfamiliar in terms of vocabulary. In simple terms, students can utilize their predictive capabilities and logical reasoning to decipher meanings from a text.

The results of this research are consistent with the findings of Hasani et al. (2013), who investigated the relationship between the critical thinking skills of Iranian EFL students’ and their proficiency in the comprehension of journalistic texts. The results indicate that individuals with superior critical thinking skills exhibit increased proficiency in reading.
journalistic materials. Developing critical thinking abilities at a university level is crucial since educators can keep track of their students’ cognitive progress and offer guidance as necessary (Hassani et al., 2013).

Furthermore, the present research has identified a correlation between students’ academic aptitude, critical thinking category, and literal text comprehension abilities. The variables under investigation were significantly interrelated within the context of literary text comprehension. Moreover, it is imperative for students learning English as a foreign language to enhance their critical thinking aptitude, as those who have inadequate critical thinking skills may fail to adapt to the global workplace, expand their knowledge, and make new and inventive contributions to the international community.

Critical thinking abilities are progressively becoming more valuable in the present intensely aggressive global setting. English plays a vital role as a lingua franca in promoting intercultural communication globally, especially among non-native speakers. Thus, effective communication in multicultural settings requires the development of critical thinking skills. In this specific context, readers with an analytical mindset strive to differentiate among facts, theories, opinions, and beliefs (Antonova et al., 2020; Shiraev & Levy, 2020; Sobkowiak, 2016). To be exact, Starkey differentiates between facts and opinions, recommending that critical readers investigate the topics discussed, the author’s conclusions, the reasoning behind the author’s assertions or beliefs, and whether the author is using factual evidence, theories, or assumptions.

Critical reading requires students to focus on specific aspects of written material while retaining other information in memory. It involves analysis, reflection, evaluation, and the formation of judgments, which often requires a slower reading pace than when reading for general contextual knowledge. The methodology used in this research project is based on Jun Xu’s (2011) proposal, which involves a five-stage process. The first phase is the initial stage and involves pre-reading, which introduces cultural or background knowledge to students. The subsequent phase comprises comprehending the text and explaining the primary idea of each paragraph, followed by an analysis of the text’s logical structure. Evaluating the integrity of the text is the final stage. The second, third, fourth and fifth steps involve writing or producing texts.
CONCLUSION

This study aims to use higher-order thinking skills (HOTS) within the learning process to increase the effectiveness of the learning process. Based on the results and discussion, it can be concluded that explicit instruction in critical thinking has a notable effect on students’ literary text reading ability. The data suggests a considerable improvement in post-test scores compared to the pre-test scores. A substantial correlation exists among students’ academic prowess, critical thinking categories, and literary reading abilities. Students with high critical thinking categories attained the highest scores in their literary reading proficiency. Similarly, the test on literary reading ability witnessed the greatest improvement among students with moderate academic potential.

The study's findings hold relevance for TEFL teachers and educators and can assist them in accomplishing the demanding tasks in EFL contexts, where students are exposed to the language comparatively less than in ESL contexts. It is advisable for teachers to instruct students in using critical thinking abilities to access pertinent knowledge and enable efficient language learning in the classroom. Moreover, this investigation provides supplementary proof bolstering the significance of critical thinking education in advancing reading comprehension. Earlier studies have confirmed that students’ understanding of literary works can be improved via structured lessons in critical thinking or the adoption of literary works as a platform for instruction rooted in critical thinking. Teachers can support students in applying critical thinking strategies to improve their literary reading skills, leading to the development of their critical thinking proficiency. It is a crucial objective of education, especially in the current global education environment.

Maintaining an objective viewpoint is essential in academic writing, and writers should avoid subjective evaluations unless clearly marked as such. Information should be presented clearly, concisely, and logically, with a causal connection between statements. Technical terms should be explained when first used, and sentence and paragraph structures should be clear and coherent. A formal register, precise word choices, and grammatical correctness are essential in producing high-quality academic writing. Additionally, authors should include common academic sections and adhere to established citation and formatting guidelines while avoiding biased language. It is crucial to ensure a well-structured text presenting logical connections between statements using formal and objective language. Informal expressions, ambiguous terminology, and biased or evaluative statements must be avoided. Additionally,
adhering to conventional academic standards, employing precise vocabulary, and maintaining grammatical accuracy are recommended.

REFERENCES


