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Critical writing in higher education: A need analysis survey

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ABSTRACT

Critical thinking and writing are considered as one of the twentyfirst century skills that must be acquired by students; however, research on this area still needs more empirical paucity of evidence. The present study aims to reveal English students' learning needs on critical writing course at university level. Drawing on survey research, this study invites 437 undergraduate students majoring in English department from four universities in Surakarta municipality, Indonesia. Statistical analysis identifies key student priorities: acquiring, evaluating, and synthesizing information; effective communication; articulating their opinions; publishing their writings; and presenting materials at international forums. The data also reveal that English students encounter significant challenges in critically analyzing information and drawing conclusions from reading passages. Regarding their expectations for critical writing instruction, students aspire to enhance both their critical thinking and academic writing abilities. This is particularly pertinent for preservice teachers who will need to teach content and produce both academic and non-academic publications. Additionally, the survey indicates a positive student response to incorporating technology (e.g., social media, networking sites, websites) into collaborative learning activities for critical writing courses. These findings provide valuable insights into the needs and expectations of English students regarding critical writing courses, offering a clear direction for course design and instructional strategies.

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Introduction

Critical thinking is a cognitive process that involves analyzing, evaluating, and synthesizing information to form reasoned judgments and make well-informed decisions. It requires individuals to question assumptions, identify biases, and assess the validity of evidence (Barjesteh & Niknezhad, 2020). In the context of education, fostering critical thinking is essential as it equips students with the skills necessary to navigate complex problems and challenges in various aspects of life (Teng & Yue, 2023; Zhang et al., 2023). Critical thinking promotes intellectual rigor and curiosity, encouraging students to look beyond surface-level information and develop a deeper understanding of issues

(Anderson et al., 2023; Kusumaningrum & Pratiwi, 2024). This ability to think critically is foundational for effective communication and is closely linked to critical writing.

Critical writing is the practice of articulating reasoned arguments and presenting evidence-based analysis in written form. It demands clarity, coherence, and precision, as well as the ability to critically evaluate sources and integrate diverse perspectives. For English students, developing critical writing skills is urgent because it enhances their academic performance and prepares them for professional success (Kazemian et al., 2021; Liu et al., 2023). In an increasingly information-rich world, the ability to critically analyze texts and construct well-argued essays is invaluable (Lam et al., 2018; Murtadho, 2021). Critical writing empowers students to convey their ideas persuasively and contribute meaningfully to scholarly and public discourse (Lustyantie et al., 2022). As such, integrating critical thinking into writing instruction is crucial for cultivating competent and reflective writers capable of navigating and contributing to the complexities of modern society.

A critical writing course is vital in English language teaching as it equips students with essential skills for academic and professional success. Such a course emphasizes the development of clear, coherent, and well-argued writing, fostering the ability to construct and critique arguments effectively (Hanim et al., 2020). Through critical writing, students learn to evaluate sources, synthesize information, and present nuanced perspectives, enhancing their analytical and reasoning abilities (Wu et al., 2023). This not only improves their writing proficiency but also deepens their understanding of various subjects, promoting intellectual growth and independence (Selvaraj & Aziz, 2019). Furthermore, in an era where misinformation is prevalent, the ability to critically assess and articulate well-supported viewpoints is crucial (Ebadi & Rahimi, 2018). Thus, a critical writing course is indispensable for nurturing informed, articulate, and critical thinkers who can navigate and contribute to an increasingly complex and information-rich world.

As critical writing is crucial in English language teaching context, conducting research on this area, particularly through students' learning need analysis, is urgently needed to tailor educational approaches that effectively develop this essential skill. As the demands of academia and the professional world grow increasingly complex, understanding the specific needs and challenges students face in mastering critical writing is crucial (Barjesteh & Niknezhad, 2020; Yundayani et al., 2017). By analyzing these needs, educators can design targeted interventions and curriculum adjustments that address gaps in knowledge, skills, and confidence. This research enables the creation of more effective teaching strategies that foster critical thinking and writing competencies, ensuring that students are well-prepared to articulate their ideas clearly, argue persuasively, and engage thoughtfully with diverse perspectives. Additionally, identifying and addressing these needs can lead to more equitable education outcomes, as it helps in providing support to students who may struggle with critical writing due to varying educational backgrounds or language proficiencies. Therefore, investing in this research is essential for enhancing the overall quality of education and empowering students to succeed in their academic and professional development.

Recent research on critical writing highlights several important trends and findings. A study of Yundayani et al. (2017) emphasizes the increasing need for developing critical writing skills among students, noting that these skills are essential for effective communication and academic success. The research underscores that students often lack the necessary analytical and evaluative abilities to construct well-supported arguments, which are crucial for academic writing and beyond. Another recent article explores the specific needs of English as a Second Language (ESL) students in mastering critical writing (Selvaraj & Aziz, 2019). The study found that these students face unique challenges, such as difficulties with linguistic nuances and cultural differences in argumentative styles. By identifying these specific needs, the research suggests targeted interventions, including specialized curricula and instructional strategies, to help ESL students improve their critical writing abilities. Furthermore, Yamin et al. (2023) conducted a comprehensive

analysis of the effectiveness of current critical writing programs. It highlighted gaps in existing curricula, particularly the lack of emphasis on critical thinking frameworks and practical application of critical writing skills. The research advocates for a more integrated approach that combines theoretical knowledge with practical exercises, enabling students to develop and apply their critical writing skills more effectively in real-world contexts.

Despite the above-mentioned studies, specific needs of critical writing in EFL setting becomes a research gap that still needs further investigations. Conducting research on students' learning needs in critical writing is crucial because it provides valuable insights into the specific challenges and requirements of the learning process (Guo et al., 2024; Kang, 2022; Mehta & Al-Mahrooqi, 2015). This information helps educators tailor instructional strategies and curricula to address gaps in knowledge and skills effectively. Such research can reveal common difficulties students face, such as understanding complex texts, constructing logical arguments, or using appropriate academic language. Identifying these needs allows for the development of targeted interventions that can improve students' critical writing abilities, leading to better academic outcomes and enhanced critical thinking skills. Furthermore, understanding students' learning needs can contribute to creating a more supportive and inclusive learning environment. It ensures that all students, including those from diverse linguistic and cultural backgrounds, receive the necessary support to succeed. By aligning teaching methods with students' needs, educators can foster greater engagement, motivation, and confidence in students, ultimately leading to a more effective and equitable educational experience. Overall, such surveys are a key tool in advancing educational quality and student success in critical writing.

Therefore, the present study aims to portray English learners' needs of critical writing in higher education setting. To reach the objective, survey research is conducted to depict the English learners' insights on teaching critical writing. This need analysis survey is expected to inform policy decisions by providing evidence-based insights into the effectiveness of current teaching practices and the areas needing improvement. Policymakers can use this data to allocate resources more efficiently, support professional development for educators, and implement changes that enhance overall educational quality. Ultimately, the implications of conducting need analysis research extend beyond the classroom, contributing to the creation of a more robust and responsive education system that better prepares students for the complexities of academic and professional writing in the modern world.

Method

This study sheds light on English learners' perspectives on learning needs of critical writing course in university setting. To this end, survey research was chosen. Survey research is a method of collecting data from a predefined group of respondents to gain information and insights on various topics of interest, with the potential to uncover trends, attitudes, and behaviors (Nardi, 2018). Using survey research in an education context allows educators to systematically gather data on students' needs, preferences, and challenges, enabling informed decisions that enhance teaching strategies and learning outcomes (Rea & Parker, 2014). In the context of this study, the survey is employed to reveal learning needs on critical writing course of a group of English students at university level. Hence, survey research is deemed appropriate to carry out the aim of this study.

A total of 437 EFL students participated in the survey. They were students of English education department coming from four universities in Surakarta municipality, Central Java province, Indonesia. The participants were selected using convenient sampling, meaning that as long as they were English department students, they could participate in this study. Among the participants, 79 (18.8%) students are male, and 358 (81.2%) are female. They were mostly 20 years old (73.8%) and were studying in semester 2. They have taken critical writing or related course such as argumentative writing, academic

writing, and critical reading and writing. Before the data collection, they were informed that their data would only be used for the purpose of this research. Also, their consents to participate in the survey have been obtained.

The data were gathered using an online questionnaire through Google forms. A total of 60 items referring to Hutchinson and Waters' (1987) model of need analysis were developed, and were divided into several aspects, i.e. necessities (20 items), lacks (15 items), wants (10 items), teaching activities (6 items), and teaching materials (9 items). The items were measured using four-point Likert scale starting from 1 (strongly disagree) to 4 (strongly agree). Before being used to collect the data from the participants, the questionnaire was validated by an expert in English language teaching, and was piloted to a group of undergraduate students majoring in English department (N: 30). After undergone several revisions, the questionnaire was further employed to elicit the participants' response about the learning needs of critical writing in university setting. The online questionnaire was distributed to the targeted participants through several digital platforms such as WhatsApp application, emails, and Instagram. The data collection was conducted from March to May 2024. At the end, 437 responses were recorded for data analysis.

The data obtained from survey were further analyzed by following several procedures. First, the participants' responses, derived from the outputs of Google forms, were tabulated in Microsoft Excel program, and were classified based on each aspect, i.e., necessities, lacks, wants, teaching activities and teaching materials. Second, analysis on the participants' demographic information and the validity and reliability of the data were performed. Third, statistical analysis in terms of mean and standard deviation was carried out by the assistance of SPSS version 28. Finally, interpretation of the data was done to examine the priority of students' learning needs in critical writing.

Results

Respondents' demographic information

Table 1 presents the demographic information of 437 university English students who participated in a survey assessing their learning needs for critical writing. The gender distribution is notably imbalanced, with a predominant female representation. Out of the total respondents, 354 (81.2%) are female, while only 63 (18.8%) are male. This substantial disparity highlights a gender skew typical in language studies, where female students frequently outnumber male students. The age distribution of the respondents shows that the majority fall within the 19 to 20 years old range. Specifically, 323 students (73.8%) are within this age bracket, reflecting the typical age of undergraduates. A smaller portion of respondents are under 19 years old, accounting for 40 students (9%). The age groups of 21 to 22 years old and 23 to 24 years old include 63 (14.7%) and 6 (1.4%) students, respectively. Only 4 respondents (1.1%) are older than 23 years, indicating a minor presence of older students.

Moreover, Table 1 further shows that the data on the length of time respondents have been learning English reveals a broad range of experience levels. A significant number of students, 218 (49.8%), have been learning English for 3 to 4 years. This is followed by 112 students (25.6%) who have been learning for 5 to 6 years. A smaller group, 67 students (15.5%), have 1 to 2 years of English learning experience, while only 16 students (3.6%) have been learning for less than a year. The least represented group includes 24 students (5.4%) with over 6 years of English learning experience. The respondents' frequency of learning with technology per day varies considerably. The majority of students, 157 (35.9%), reported using technology very often, for more than 5 hours a day. Another significant portion, 143 students (32.7%), use technology often, for 4 to 5 hours daily. A substantial number, 107 students (24.4%), engage with technology sometimes, for 2 to 3 hours a day. A smaller group, 26 students (5.9%), rarely use

technology for less than an hour per day. Notably, only 4 students (0.9%) indicated that they never use technology for learning. In conclusion, this demographic analysis provides a comprehensive overview of the English students' backgrounds, highlighting significant trends and variations in gender, age, length of English learning, and technology use. These factors are critical for tailoring educational strategies to meet the diverse needs of students in critical writing courses.

Table 1	Respondents'	demographic information	
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N	Characteristics		Frequency	Percentage
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437	Gender	Male	354	18.8%
		Female	63	81.2%
	Age	< 19 years old	40	9%
		19 – 20 years old	323	73.8%
		21 – 22 years old	63	14.7%
		23 - 24 years old	6	1.4%
		> 23 years old	4	1.1%
	Length of	< 1 year	16	3.6%
	learning English	1 – 2 years	67	15.5%
		3 – 4 years	218	49.8%
		5 – 6 years	112	25.6%
		> 6 years	24	5.4%
	Frequency of	Never (0 hour)	4	0.9%
	learning with	Rarely (< 1 hour)	26	5.9%
	technology in a	Sometimes (2 – 3 hours)	107	24.4%
	day	Often (4 – 5 hours)	143	32.7%
	-	Very often (> 5 hours)	157	35.9%

English students' learning needs in critical writing

Table 2 presents the results of a data analysis examining the perceived necessities of a critical writing course from the perspective of English students. Table 2 lists 20 different aspects of critical writing, each with an associated mean score, indicating the importance placed on these aspects by the students. The highest mean score, 3.35, is attributed to "Analyzing information," suggesting that students consider the ability to dissect and understand information as the most critical skill in their writing endeavors. This is closely followed by "Writing material presentation in English" with a mean score of 3.29, highlighting the importance of effectively presenting information. Other high-scoring aspects include "Selecting essential information" (3.23), "Answering questions in tests" (3.22), and "Writing opinions in English" (3.22), underscoring the value placed on information selection, test-taking skills, and opinion writing.

Conversely, the aspects with lower mean scores indicate areas deemed less critical by the students. "Conveying ideas to others" scores the lowest at 2.73, followed by "Exchanging information with others" (2.76), and "Criticizing texts" (2.78). These scores suggest that while these skills are still relevant, they are not viewed as imperative as others. The necessity of "Delivering ideas and thoughts in international forums" and "Publishing writing works in publication platforms" both score 2.78 and 2.93 respectively, reflecting a moderate importance placed on these global communication skills. Additionally, aspects like "Communicating with foreigners" (3.07), "Composing scientific works in English" (3.09), and "Delivering and responding to comments" (3.04) reflect a recognition of the importance of English communication in diverse contexts, albeit with

slightly lower emphasis. Overall, the data reveals that English students prioritize analytical and presentation skills in their critical writing courses, while still valuing a range of other competencies necessary for comprehensive writing proficiency.

Table 2. Learning necessities of critical writing

No.	Aspect	Mean
1	Selecting essential information	3.23
2	Analyzing information	3.35
3	Summarizing information	2.97
4	Criticizing texts	2.78
5	Exchanging information with others	2.76
6	Conveying ideas to others	2.73
7	Having communication with others	3.21
8	Communicating with foreigners	3.07
9	Delivering ideas and thoughts in international forums	2.78
10	Publishing writing works in publication platforms	2.93
11	Filling out registration forms in English	3.14
12	Answering questions in tests	3.22
13	Composing scientific works in English	3.09
14	Writing material presentation in English	3.29
15	Delivering and responding to comments	3.04
16	Writing texts in English	3.21
17	Designing learning materials in English	3.12
18	Writing news/reports in English	3.13
19	Writing argumentative text in English	3.14
20	Writing opinions in English	3.22

Note: The mean score is derived from the average of four-point likert scale (1: very disagree, 2: disagree; 3: agree, 4: very agree)

Table 3 provides insights into the areas where English students feel they need more support or development in their critical writing courses. Table 3 enumerates 15 different aspects, each accompanied by a mean score that reflects the perceived deficiency in these areas. The highest mean score, 3.16, is attributed to "Identifying if an event is appropriate," indicating that students find this aspect most lacking in their current curriculum. Other notable areas with relatively high mean scores include "Understanding appropriate timing of an event" (3.10) and "Comparing information" (3.09). These scores suggest that students are aware of the importance of context and comparative analysis in critical writing but feel they need more guidance and practice in these skills.

In the contrary, the aspects with lower mean scores reveal areas where students feel slightly more confident, though still recognizing the need for improvement. "Evaluating strengths and weaknesses of an event" has one of the lower scores at 2.86, followed closely by "Showing interrelation relevance among some information" (2.87) and "Evaluating the significance of an event" (2.93). Despite these being on the lower end of the spectrum, they still represent significant areas for enhancement. Other aspects such as "Providing logic judgements/opinions of an event" (3.07), "Giving the right reasons in every decision taken" (3.07), and "Showing logic reasons of an event" (3.04) highlight a general need for better logical reasoning and judgment skills. Overall, Table 3 illustrates a comprehensive range of perceived deficiencies in critical writing skills from the students' perspective, emphasizing the need for a more robust curriculum that addresses these gaps, particularly in understanding context, timing, and logical analysis.

Table 3. Learning lacks of critical writing

No.	Aspect	Mean
21	Identifying the significance of an event	2.96
22	Evaluating strengths and weaknesses of an event	2.86
23	Comparing information	3.09
24	Providing logic judgements/opinions of an event	3.07
25	Finding particular cases based on evidence	3
26	Showing logic reasons of an event	3.04
27	Directing an event	3.02
28	Identifying if an event is appropriate	3.16
29	Understanding appropriate timing of an event	3.10
30	Considering the important parts of an information	3.05
31	Giving the right reasons in every decision taken	3.07
32	Evaluating the significance of an event	2.93
33	Arranging information obtained from an event	3.06
34	Showing interrelation relevance among some information	2.87
35	Taking conclusion of information	3.05

Note: The mean score is derived from the average of four-point likert scale (1: very disagree, 2: disagree; 3: agree, 4: very agree)

In a similar direction, Table 4 demonstrates a detailed look at the areas where English students express a desire for further development in their critical writing courses. Table 4 lists 10 aspects, each accompanied by a mean score that reflects the importance students place on these areas for their learning experience. The highest mean score, 3.54, is associated with "Analyzing information (facts and opinions)," indicating that students highly value the ability to discern and evaluate information critically. Following closely is "Thinking carefully before taking action/decision," with a mean score of 3.53, highlighting the importance students place on thoughtful deliberation and decision-making processes. "Being responsible for their writings" also scores highly at 3.48, showing that students want to develop a strong sense of accountability in their writing practices.

Other significant aspects include "Giving appropriate and logic responses" (3.47), "Composing logic and structured writings" (3.46), and "Understanding others' ideas and opinions" (3.45). These scores suggest that students place a high value on logical reasoning, structured composition, and comprehension of different viewpoints. The mean score of 3.43 for both "Criticizing others' writings" and "Giving assessment based on evidence" indicates a strong desire to develop skills in constructive criticism and evidence-based assessment. Meanwhile, "Analyzing issues from multiple perspectives" scores 3.39, reflecting the importance of a well-rounded analytical approach. "Understanding detailed information in texts" has a slightly lower mean score of 3.27, but still signifies a considerable interest in grasping detailed textual information. Overall, Table 4 highlights that English students are keen to enhance their critical thinking, logical reasoning, and analytical skills within their critical writing courses, emphasizing a comprehensive and structured approach to writing.

Table 4. Learning wants for critical writing

No.	Aspect	Mean
36	Criticizing others' writings	3.43
37	Analyzing information (facts and opinions)	3.54
38	Thinking carefully before taking action/decision	3.53
39	Giving assessment based on evidence	3.43
40	Being responsible for their writings	3.48

No.	Aspect	Mean
41	Analyzing issues from multiple perspectives	3.39
42	Understanding detailed information in texts	3.27
43	Giving appropriate and logic responses	3.47
44	Composing logic and structured writings	3.46
45	Understanding others' ideas and opinions	3.45

Note: The mean score is derived from the average of four-point likert scale (1: very disagree, 2: disagree; 3: agree, 4: very agree)

Moreover, Table 5 depicts insights into students' views on various teaching-learning activities that can enhance their critical writing skills. Table 5 lists six different aspects, each with an associated mean score, reflecting the importance students place on these activities. The highest mean score, 3.39, is attributed to "Sourcing, reading, thinking, and writing," indicating that students find this comprehensive approach to be the most beneficial for developing their critical writing skills. This suggests that students appreciate a holistic approach that combines multiple facets of learning, from gathering information to articulating thoughts in writing.

Following closely is "Developing arguments, analyzing issues, finding evidence, and composing critical writing," with a mean score of 3.36. This indicates that students value activities that not only help them form and support arguments but also enhance their overall composition skills. "Performing independent learning" scores 3.32, reflecting a recognition of the importance of self-directed learning in fostering critical writing abilities. The slightly lower score of 3.3 for "Conducting flipped classroom (pre-class activity, in-class activity, and post-class activity)" suggests that while students see value in this innovative teaching method, it may not be as highly regarded as more traditional or independent learning activities.

Other notable aspects include "Performing collaborative learning activities," with a mean score of 3.29, and "Implementing STAD (Student Team Achievement Division) learning," with a mean score of 3.26. These scores suggest that students recognize the value of collaborative and team-based learning approaches, though they may prefer a balance that also includes independent and structured activities. The data implies that students see a blend of sourcing and thinking processes, argument development, and both independent and collaborative efforts as key components in enhancing their critical writing skills. Overall, Table 5 underscores the importance of a diverse set of learning activities, combining traditional methods with innovative and collaborative approaches to create a well-rounded critical writing curriculum.

Table 5. Learning activities to enhance critical writing

No.	Aspect	Mean
46	Sourcing, reading, thinking and writing	3.39
47	Developing arguments, analyzing issues, finding evidence, and composing critical writing	3.36
48	Conducting flipped classroom (pre-class activity, in-class activity, and post-class activity)	3.3
49	Implementing STAD (Student Team Achievement Division) learning	3.26
50	Performing collaborative learning activities	3.29
51	Performing independent learning	3.32

Note: The mean score is derived from the average of four-point likert scale (1: very disagree, 2: disagree; 3: agree, 4: very agree)

Last but not least, Table 6 captures English students' perspectives on various materials that can enhance their critical writing practice. Table 6 lists nine different

aspects, each with a corresponding mean score indicating the level of importance students assign to these materials. The highest mean score, 3.54, is attributed to "Integrating technology into critical writing practice," suggesting that students place significant value on using technological tools to aid their writing development. This indicates a strong preference for modern, tech-driven approaches to learning that can make the practice of critical writing more engaging and efficient.

Other highly regarded aspects include "Understanding recent issues" (3.43), "Conducting peer-feedbacks" (3.43), and "Doing revisions/improvements based on teacher's feedbacks" (3.43), all highlighting the importance of staying informed about current events, peer collaboration, and iterative learning processes. These scores reflect students' recognition of the need to engage with contemporary topics, actively participate in feedback mechanisms, and continuously improve their writing based on constructive criticism. "Reading scientific works (such as articles, journals, essays, etc.)" also scores highly at 3.42, underscoring the value students place on exposure to high-quality academic literature as a means to enhance their critical writing skills.

Other aspects such as "Conducting teacher-student feedbacks/correction" (3.40) and "Performing self-correction" (3.38) further emphasize the importance of feedback and self-assessment in the learning process. "Posting ideas/thoughts on social media" (3.31) and "Doing online quizzes" (3.28) score slightly lower, but still represent valued components of the learning materials. These scores suggest that while students see some benefit in using social media and quizzes to practice and test their skills, they may prefer more traditional and feedback-oriented methods. Overall, Table 6 illustrates a comprehensive view of the preferred learning materials for critical writing from the students' perspective, highlighting a balanced mix of technology integration, feedback mechanisms, and engagement with contemporary issues and academic literature.

Table 6. Learning materials to facilitate critical writing practice

No.	Aspect	Mean
52	Integrating technology into critical writing practice	3.54
53	Understanding recent issues	3.43
54	Reading scientific works (such as articles journals, essays, etc.)	3.42
55	Conducting teacher-student feedbacks/correction	3.4
56	Doing online quizzes	3.28
57	Conducting peer-feedbacks	3.43
58	Performing self-correction	3.38
59	Doing revisions/improvements based on teacher's feedbacks	3.43
60	Posting ideas/thoughts on social media	3.31

Note: The mean score is derived from the average of four-point likert scale (1: very disagree, 2: disagree; 3: agree, 4: very agree)

Discussion

The statistical analysis of the research data highlights several key priorities for English students in developing their critical writing abilities. Students have identified gaining, evaluating, and synthesizing information as crucial skills. This prioritization underscores the foundational role these skills play in critical writing. Gaining information involves effectively searching for and identifying relevant sources, which is the first step in any critical writing process (Suteja & Setiawan, 2022). Evaluating information is equally important, as it involves assessing the credibility and relevance of the gathered data. Synthesizing information, on the other hand, refers to the ability to combine various pieces of information to form a coherent and comprehensive understanding of a topic

(Ataç, 2015). These skills are essential not only for academic writing but also for professional communication and lifelong learning.

Furthermore, students have indicated a strong need for developing their ability to communicate with others. This includes writing their opinions clearly and persuasively, which is a critical aspect of critical writing. The ability to publish their writings and present materials in international forums is also a priority. This finding highlights the students' awareness of the global nature of modern academia and their desire to engage with a broader audience (Kushki et al., 2022; Wambsganss et al., 2022). The emphasis on international forums suggests that students are looking to build a strong academic presence and contribute to global discussions, which requires high-level critical writing skills (Nejmaoui, 2019).

The research findings also reveal that English students face significant challenges in critically analyzing information and drawing conclusions within reading passages. This difficulty suggests that while students may be proficient in basic comprehension, they struggle with higher-order thinking skills required for critical analysis. Critical analysis involves examining arguments, identifying biases, evaluating evidence, and understanding underlying assumptions (Eady et al., 2019; Ebadi & Rahimi, 2018). Drawing conclusions, meanwhile, requires synthesizing this analysis into a coherent argument or perspective (Nurkamto et al., 2024). These difficulties may stem from various factors, including a lack of practice, insufficient instruction in critical thinking skills, or the complexity of the texts being analyzed (Kerman et al., 2022; Kushki et al., 2022). Addressing these challenges is crucial for developing students' critical writing abilities, as the ability to analyze and conclude critically is fundamental to producing well-argued and persuasive texts. This finding indicates a need for more focused instruction and practice in these areas to help students overcome these challenges and improve their critical writing skills.

The students' expectations for teaching critical writing are closely aligned with their identified needs. They express a desire to develop both critical thinking and academic writing skills. As pre-service teachers, these students recognize the dual role they will play in the future: not only will they need to teach materials effectively, but they will also need to compose and publish their own academic and non-academic works. This dual role necessitates a strong foundation in critical writing, as it is essential for both teaching and scholarly activities (Liu et al., 2023). Developing critical thinking skills is particularly important for pre-service teachers, as it enables them to foster these skills in their future students (Biju & Vijayakumar, 2023). Academic writing skills, meanwhile, are crucial for contributing to scholarly discourse and professional development. This expectation highlights the students' recognition of the importance of critical writing in their future careers and their desire for comprehensive training in this area (Kushki et al., 2022). The emphasis on both critical thinking and academic writing suggests that students are looking for a holistic approach to teaching critical writing that integrates these interconnected skills.

The survey results further indicate that the majority of students respond positively to the integration of technology in collaborative learning activities for the critical writing course. This finding reflects the growing recognition of technology's potential to enhance learning experiences. As found by previous studies, social media, social networking sites, websites, and other technological tools can facilitate collaboration, provide access to a wide range of resources, and support the development of critical writing skills (Aloraini, 2018; Isbell, 2018; Nugroho & Rahmawati, 2020). The positive response to technology integration suggests that students are open to innovative teaching methods that leverage digital tools. Collaborative learning activities enabled by technology can help students engage more deeply with course content, share ideas, and receive feedback from peers and instructors (Joseph et al., 2022). This collaborative approach aligns with the principles of active learning, which have been shown to be effective in developing critical thinking and writing skills (Kusumaningrum & Pratiwi, 2024). The use of technology can

also make learning more accessible and flexible, accommodating different learning styles and preferences.

The findings of this research have several implications for the design of critical writing courses for English students. First, course content should prioritize the development of skills in gaining, evaluating, and synthesizing information, as these are foundational to critical writing. Instruction should include explicit teaching of these skills, along with ample opportunities for practice and feedback. Additionally, the course should address the specific challenges students face in critically analyzing information and drawing conclusions. This could involve the use of scaffolded activities, where students progressively build their skills through guided practice and increasingly complex tasks.

Furthermore, the course should incorporate elements that foster the development of critical thinking and academic writing skills, in line with students' expectations. This could include assignments that require critical analysis, synthesis of multiple sources, and the production of well-argued texts. The integration of technology should also be considered, as it can enhance collaborative learning and provide additional resources for developing critical writing skills. Finally, the course should provide opportunities for students to publish their writings and present their work in international forums, helping them build a strong academic presence and engage with a global audience.

Conclusion

To sum up, the current study is conducted to obtain learning needs of critical writing from a group of English department students. Drawing on survey research, this study conveniently involves 437 students majoring in English from four universities in Surakarta municipality. The results of the survey show which learning needs of critical writing that must be prioritized to be accommodated in teaching and learning process. Based on the statistical analysis, several students' needs that become their priorities are gaining, evaluating and synthesizing information, communicating with others, writing their opinions, and publish their writings and presenting materials in international forums. The results also indicate that English students have difficulty to critically analyzing information and drawing conclusions within reading passages. As for their expectations in teaching critical writing, they want to develop critical thinking and academic writing skills, because as pre-service teachers, they will not only teach materials but also compose and publish their writings both academic and non-academic works. Moreover, according to the survey, the majority of the students respond positively to the integration of technology (e.g., social media, social networking sites, websites, etc.) in collaborative learning activities for critical writing course.

While the present survey research offers valuable initial insights into the learning needs of English students in a critical writing course, it is important to acknowledge and address its limitations. First, this survey often relies on self-reported data, which can lead to superficial responses. Students may not fully understand their own learning needs or might provide socially desirable answers rather than honest assessments. This can result in an incomplete or inaccurate portrayal of their true needs. Second, this survey uses closed-ended questions to facilitate quantitative analysis, but these questions may not capture the nuanced and complex nature of students' learning challenges. Critical writing requires deep cognitive skills, and understanding these needs might require more detailed, qualitative data that surveys cannot provide. Moreover, this survey might not adequately capture the context in which students' learning needs arise. Factors such as classroom environment, teaching methods, and individual student backgrounds significantly influence learning needs but are difficult to quantify and analyze through surveys alone. Therefore, complementing this survey with qualitative methods, such as interviews or focus groups, and ensuring a representative sample can help mitigate some of these issues and provide a more comprehensive understanding of students' learning needs. It is practical recommendation for future research.

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