Needs Analysis of Professional Writing in the 21st Century Among Malaysian Tertiary Students

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ABSTRACT

English language learning plays a central role in the academic and professional development of tertiary students. In an increasingly globalised world, language proficiency is not only essential for personal development but also provides a competitive advantage in the job market. This study aimed to explore the needs analysis of how language learning is useful for tertiary students, focusing on communication, collaboration, as well as creativity and critical thinking (4Cs) skills of the 21st century that are incorporated in tertiary education. This is important for students' career opportunities. A needs analysis is a structured method employed to assess and identify the needs, deficiencies, and goals of the study to close the research gap. The problem addressed is the gap between students' writing skills upon graduation and the capabilities required by employers in Malaysia, where English proficiency in professional settings is highly valued and needed. A qualitative approach was implemented by using participant observation and a document analysis checklist with nine tertiary students from a private university in Malaysia. The results revealed that the students used 4Cs skills when they did their professional writing tasks in their groups. This shows that there were significant skill gaps, particularly in professional writing skills, such as report writing, email etiquette, and proposal drafting. Therefore, the study addressed the essential function these abilities serve in enhancing academic achievement, fostering career preparedness, and promoting personal development. The findings have implications for educators and policymakers in designing curricula that better prepare Malaysian graduates for the challenges of the workplace. This will help to tailor to the needs of students to bridge gaps in understanding, motivate engagement, as well as build competencies necessary for academic world and professional success. In conclusion, applying 4Cs skills of 21st century and technology within tertiary programmes could bridge the skill gap, enhancing students' employability.

Keywords: 21st century skills, professional writing course, technology, tertiary students

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INTRODUCTION

English has emerged as a universal language that is crucial for professional growth, communication, and education (Hafizah Adnan & Sayadi, 2022). In the setting of tertiary education, English is not only a medium of instruction but also an entryway to access enormous academic resources, allow participation in international research and facilitate international collaborations (Hultgren et al., 2022). Moreover, English skill has become progressively crucial for tertiary students as they formulate to enter the global workforce. In a fast-developing employment landscape, driven by digital transformation, globalisation and the rise of knowledge economies, the request for strong English communication skills has exaggerated (Rahmawati & Mege, 2023). As a result, businesses consistently identify proficiency in English as an essential requirement, pointing to its capacity to foster innovation, improve teamwork, and open more global opportunities. Therefore, it is important for higher education institutions to prepare students with strong English skills.

One of the foremost explanations for English being fundamental in professional contexts is its status as the lingua franca of business and technology. The World Economic Forum's 2023 Future of Jobs report highlighted that vigorous communication skills, often in English, for collaboration across borders, are needed among employees in this digital era to compete nationwide (Khan & Ahmad, 2023). Furthermore, the report has emphasised the need for tertiary institutions to familiarise their curricula to align with these industry demands, incorporate English skills alongside technical abilities to safeguard holistic enthusiasm for the workforce.

On the same trend, higher institutions play a vital role in shaping tertiary students' language proficiency and their self-confidence for a professional atmosphere for the upcoming years. Consequently, understanding the importance of English is indispensable for tertiary students to succeed in academia and beyond (Ramzan et al., 2023). Effective writing skills are paramount for tertiary students as they prepare to enter the workforce. This explains that clear communication is vital (Yoel et al., 2023). Writing proficiency enables students to generate ideas, make professional documents, as well as convey information efficiently in emails, reports and presentations. Employers constantly highlight the value of well-written communication as a reflection of professionalism and critical thinking. Recent studies highlight the need for targeted writing training in higher education to enhance employability and meet workplace demands (Bikar et al., 2023).

There are four main skills, such as reading, listening, speaking, and writing, that students are required to master from their primary education. Nevertheless, students from primary to tertiary levels are facing problems in their writing skills when compared with the other three skills (Chan & Hu, 2023). Basic sentence structures and grammar norms are difficult for many students to master, which compromises the writing's professionalism and clarity. Students who have a limited vocabulary may find it difficult to communicate complicated concepts clearly, particularly in specialised subjects where professional or technical terminology is necessary. Logically structuring emails, reports and essays is a regular challenge. Students frequently fall short of using professional formats or presenting their ideas in a logical manner (Abdullah et al., 2022). Furthermore, students who have little access to constructive criticism during their education struggle to improve because they are unable to discover and rectify their writing's shortcomings (Taye & Mengesha, 2024). According to the same pattern, students may be deterred from practising and improving their writing abilities due to fear of criticism or failure, which may affect their readiness for communication in a professional setting.

For this study, the 4Cs of 21st-century learning skills are applied. The aim of incorporating the four 4Cs skills, communication, collaboration, as well as creativity and critical thinking, is to enable students to improve their professional writing skills. It provides an opportunity among the students to communicate, collaborate, as well as use their creativity and critical thinking skills to complete their assignments via a technology platform.

BACKGROUND OF STUDY

Professional Writing Course

Higher education professional writing courses are pertinent for giving students the tools they require to satisfy the written communication needs of the job. According to some past studies, there is an increasing focus on practical writing abilities that meet professional standards, like creating understandable reports, proposals and digital communications (Taye & Mengesha, 2024; Thornhill-Miller et al., 2023). From the past studies, in order to improve student involvement and adaptability, these courses ought to incorporate practical assignments and group projects (Trede & Jackson, 2021). Additionally, using technology platforms and feedback systems stimulates ongoing development of writing skills. This method not only increases competitiveness but also gives students the skills to successfully negotiate challenging professional environments effectively (Zou, Xie, & Wong, 2023). Courses in professional writing offered in higher education are evidence of equipping students with the skills needed to meet the written communication demands of their careers.

Integration of the Main 4Cs of 21st Century Learning Skills

To prepare students for the present workforce, professional writing courses at the higher education level could consider including the main 4Cs of 21st-century learning skills. The 4Cs skills play an important role in helping individuals, specifically students, to progress in their necessary abilities to navigate a rapidly changing world. Therefore, effective communication enables students to listen attentively, communicate their thoughts clearly and participate in conversations appropriately. Collaboration boosts cooperation, which makes it possible for students to cooperate, divide duties and complete shared objectives. Critical thinking supports students to analyse problems, assess different viewpoints and make informed choices. Other than that, creativity inspires invention, as well as motivates students to think outside the box and find exceptional solutions to challenges. Hence, these skills are paramount in education, career development and personal growth to prepare them to familiarise and thrive in this fast-paced world of the digital age. In this current study, the 4Cs are emphasised in the core of professional writing in communication to stress audience awareness, clarity and conciseness to ensure students can effectively communicate their ideas in a variety of professional contexts (Yoel, Akiri, & Dori, 2023).

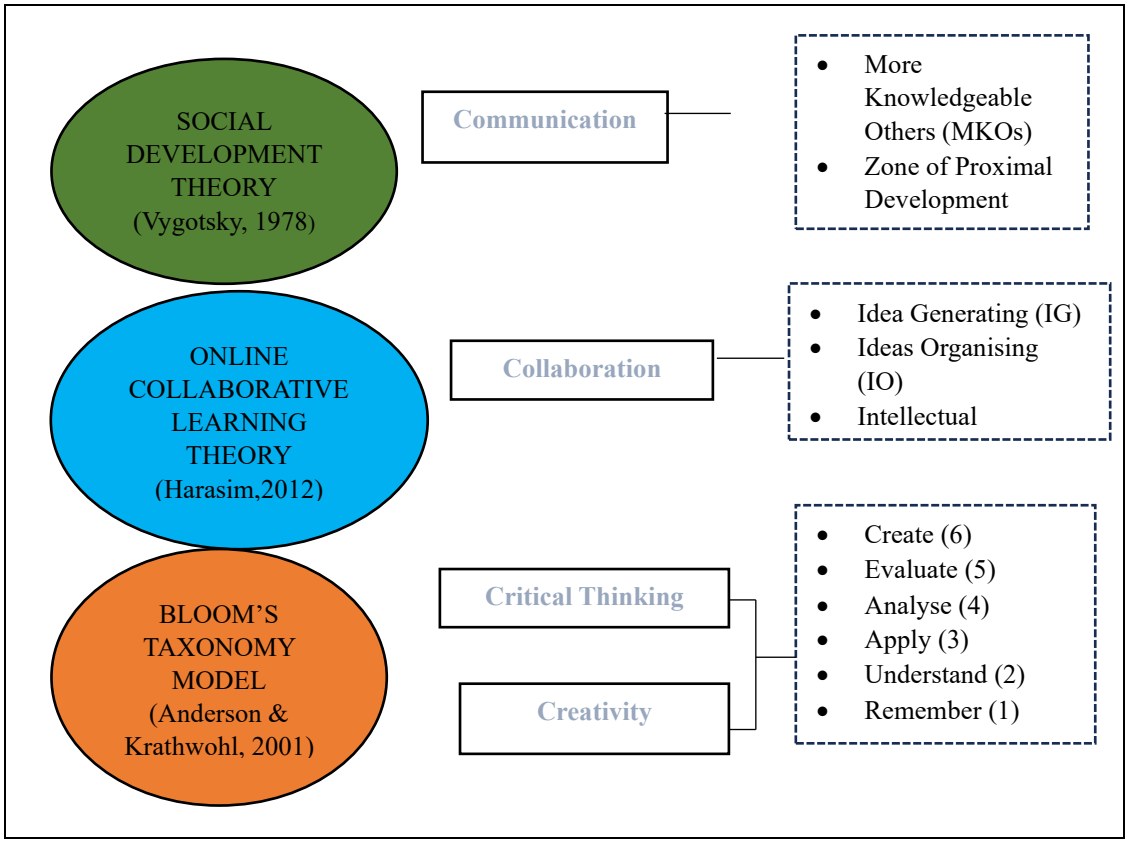
Moreover, the skill of collaboration in writing projects encourages teamwork and peer feedback, reflecting the collaborative nature of professional environments (Trede & Jackson, 2021). Critical thinking improves students' ability to analyse and structure their writing logically and address multifaceted workplace circumstances (Dumitru & Halpern, 2023). Creativity stimulates innovative approaches to problem-solving and presentation, preparing

students to familiarise themselves with diverse workplace challenges (Buhler, Jelinek, & Nubel, 2022). Hence, the past studies indicated that incorporating the 4Cs into writing syllabuses through task-based learning, real-world simulations and digital tools meaningfully progresses student engagement, writing proficiency and career readiness (Kapkir, 2024). Higher education professional writing courses might incorporate the key 4Cs of 21st-century learning skills to equip students for today's job market.

Theoretical Framework

This current study is based on two theories and one model. The theories are Social Development Theory (SDT) (Vygotsky, 1978) and Online Collaborative Learning Theory (OCL) (Harasim, 2012), and the model is the revised Bloom's Taxonomy Model (Anderson & Krathwohl, 2001). Social Development Theory is applied to elucidate that socialisation with students directly aids the development of learning. When students communicate with their group members, it progresses their cognitive development to expand in their professional writing course (Osman et al., 2023). Additionally, the persistence of incorporating Online Collaborative Learning Theory is to enable the students to use the learning management systems (LMS) platform to enhance their professional writing skills. Moreover, the revised Bloom's Taxonomy Model is used as a guide to design activities for students. This model aids in enhancing Higher Order Thinking Skills (HOTS) that allow students to use their creativity and critical thinking to do their grammar and vocabulary activities by following the steps. The theoretical framework for this study is represented in Figure 1.

Figure 1: Theoretical Framework



Utilisation of Technology Platforms

The integration of technology platforms to teach professional writing courses in higher education has become progressively significant in preparing students for the demands of the present workplaces. Technology improves learning experiences by offering accessibility to a wide range of digital tools and resources that ease writing, collaboration with peers and feedback. Studies illustrated that online platforms, such as learning management systems (LMS) and writing software, enable students to participate in a collaborative writing atmosphere, track improvement and obtain instant responses on their work (Khan et al., 2022).

Furthermore, technology helps students to progress in digital literacy, an imperative skill for professional communication in today's workplace. E-portfolios and blogs encourage students to present their writing skills and reflect on their progress (Ramasamy et al., 2024; Raynault et al., 2022). Additionally, integrating interactive programme elements, such as video tutorials or webinars, into professional writing courses boosts engagement and facilitates different learning styles. Recent studies also highlighted the significance of utilising social media platforms and collaborative tools to simulate workplace communication circumstances, preparing students for real-world writing responsibilities (Le Vo, 2022). Generally, the approach in using technology platforms nurtures a more collaborative, personalised and well-organised method to teach professional writing, as well as equip students with the skills needed in a technology-driven professional environment.

Preparation of Writing Resources

In higher education, creating writing resources is a prevalent part of teaching professional writing courses since it gives students the skills that they would need to communicate effectively in the workplace. According to earlier research, carefully designed writing materials, including instructions, templates and sample documents, aid students in comprehending professional writing norms in a variety of circumstances from emails to reports (Al Hilali & McKinley, 2021). With the help of these resources, students can improve their confidence and proficiency in professional contexts by using clear and structured frameworks that they can modify for their writing assignments.

Apart from conventional materials, interactive options, such as video courses, writing tutorials, and technology-based activities, have demonstrated efficacy in capturing students' attention and strengthening their writing abilities (Haleem et al., 2022). Aside from that, incorporating case studies and real-world examples into writing materials aids students in bridging the gap between professional and academic writing requirements (Sujinpram & Wannaruk, 2024). To ensure these materials remain relevant, faculty members are urged to update them frequently to consider changing communication technology and industry trends (Oliveira et al., 2021). Providing chances for peer review and feedback, over both face-to-face and online platforms, also enables students to enhance their writing and cooperate with others in a professional context (Elboshi, 2021). Henceforth, the development of students' capacity to communicate successfully in a variety of professional contexts ultimately depends on the creation of thorough and applicable writing materials.

Gaps from Previous Studies to the Present Study

After evaluating the past studies, it was revealed that students at the tertiary levels still encounter problems in their professional writing skills. Therefore, educators can apply the usage of the main 4Cs of 21st-century learning skills in professional writing course classes by using a technology platform. Consequently, including the usage of the main 4Cs of 21st century learning skills, technology platforms and appropriate writing materials would be an effective strategy to ensure students practise their writing skills with their group members anywhere, anytime. The purpose of the present study is to analyse the effectiveness of the primary 4Cs of 21st-century learning skills in enhancing students' professional writing through the utilisation of an online learning platform. Hence, this study focused on investigating the accompanying research question: “How does the main 4Cs of 21st-century learning skills develop students’ professional writing by using the Microsoft Teams platform?”

METHOD

Research Design

The research design of this study is a case study. A case study is a detailed examination of an individual, group, or occurrence (Heale &Twycross, 2018). In a case study, almost every element of the individual's life and background is examined to identify patterns and reasons for actions. The purpose of a case study is to gather extensive information about a person or group to enable the findings to be applied to many others. In the context of the present study, an investigation on how the students’ professional writing is enhanced was conducted through qualitative data collections, which encompassed a participant observation checklist and document analysis checklist.

Participants

The participants of this study comprised nine undergraduate students who were enrolled in a basic professional writing course in a private university. There were seven males and two females. All of them were Malaysians except for one who was an international student. In the course, the students were taught how to write a job application letter together with a resume or a Curriculum Vitae (CV), minutes of a meeting and an informal proposal, which encompassed 50 per cent of the coursework marks. They were also taught how to write professional correspondence, such as an enquiry letter, a letter of reply to an enquiry, a complaint letter, and an

adjustment letter. Additionally, they were taught how to write memorandum reports, like incident reports, recommendation reports and progress reports. They were also exposed to learn how to write a summary. The professional correspondences, memorandum reports and summaries consisted of 50 per cent of the final examination marks. The course lasted for 14 weeks, in which the students met for two hours for a lecture class and an hour for a tutorial class. The students were assigned to work in groups of four to five.

Data Collection Methods

The data collection was done for eleven weeks from Week 3 to Week 13 of the semester. The students' activities were observed by using a participation observation checklist for their group tasks. The purpose of using the participation observation checklist was to monitor the students' progress via the Microsoft Teams to complete the group tasks with their members. Different tasks were given to the students to be done in their group on a weekly basis. There were four groups tasks which involved writing a job application letter together with a resume or a CV in Week 3, an incident report in Week 6, business correspondences in the form of an email and a letter in Week 9, and a summary in Week 12. At this stage, Microsoft Teams was used as the online learning platform. Observation was conducted on the Microsoft Teams platform via the participant observation checklist through their participation and contribution to the written tasks. This is because the students were required to discuss with their group members and do all their written tasks in their private channels at the Microsoft Teams platform according to their groups.

A document analysis checklist was also used as a qualitative data collection method for their tasks. The document analysis checklist comprised items for content to determine whether the students were able to create some main ideas, as well as differentiate between the main ideas and the elements of a written essay when writing their own written essay. Additionally, the items for content on the checklist were used to determine whether the students were able to write a good theme, which would be their message, as well as write an appropriate introduction in the first paragraph, write content in a written essay and write a conclusion paragraph in the last paragraph. Moreover, the item for organisation was used to determine whether the students were able to organise their paragraphs by including the elements of a written essay. Furthermore, the items for language were used to determine whether the students were able to use the tenses correctly, as well as use logical and sentence connectors effectively to link their ideas. Other than that, the items for language were used to determine whether the students were able to use types of sentences (simple, compound and complex) correctly, as well as apply expressive words appropriately. The document analysis checklist was used to ensure whether the students improved in their writing after working in their groups. Three individual written tasks that included writing a recommendation report in Week 7, a letter of enquiry and a letter of reply to the enquiry in Week 10, as well as a summary in Week 13. Figure 2 summarises the flow of data collection in the study.

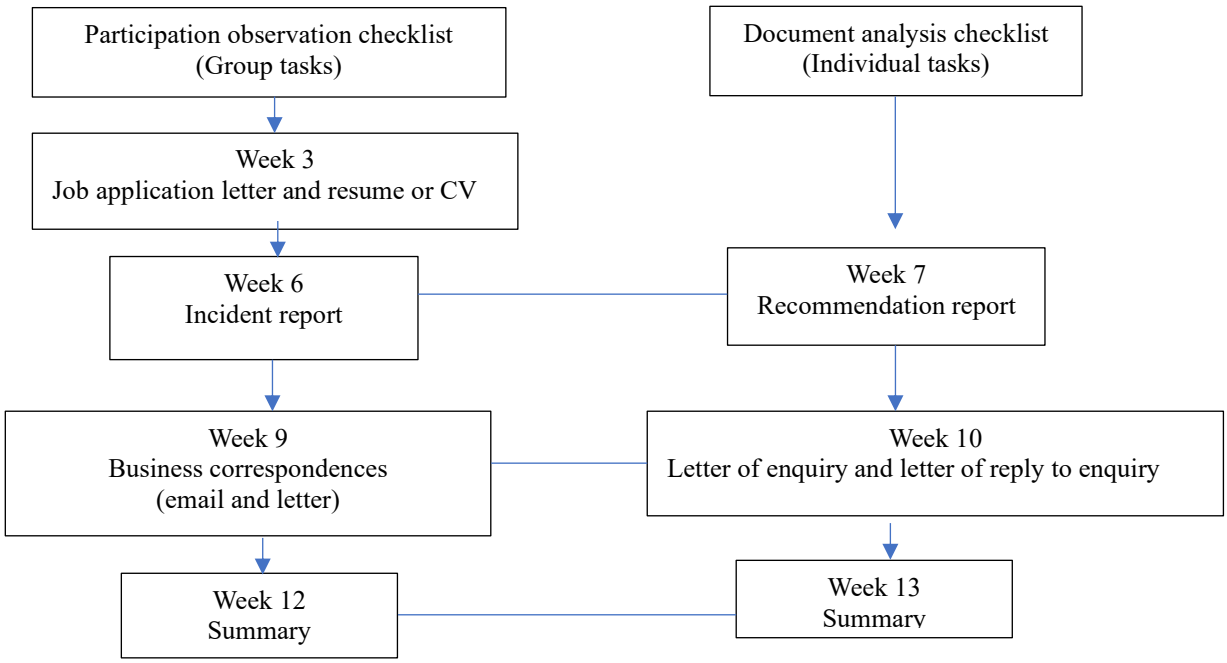


Figure 2: Flow Chart

Data Analysis Procedures

The qualitative data from participant observation and document analysis checklist were categorised according to common themes, which are: communication, collaboration, creativity, and critical thinking. The students' group progress was monitored via Microsoft Teams whenever they did their group tasks by using participant observation. The students' progress was evaluated by using the document analysis checklist.

RESULTS AND DISCUSSION

Participation Observation Checklist

There were 19 items for the participant observation checklist under five scales, which were "very frequently (VF)," "frequently (F)", "occasionally (O)", "very rarely (VR)", and "never (N)". For the scale of "very frequently," they spent more than 15 minutes tackling the tasks. Moreover, the time taken for the scale "frequently" was 11 to 15 minutes, the scale "occasionally" was six to ten minutes, the scale "very rarely" was one to five minutes, and the scale "never" was 0 minutes. The findings were divided into common themes, such as communication, collaboration, as well as creativity and critical thinking.

Under the theme of communication, the students discussed very rarely with their group members via the Microsoft Teams. This was because they did not know their group members that well in Week 3. They differentiated or analysed the main ideas and supporting details with their group members occasionally in Week 6. When they discussed or identified the elements of a written work, they brainstormed frequently in Week 9. The communication became more intensive as the students identified the connection of the title, the introduction, the body, and the conclusion with their group members in Week 12. This communicative approach would assist the students to shift their roles from being receptive students to become active students who are involved in real life interaction through authentic language. The students were able to communicate more actively with their group members because they were able to identify the strengths and weaknesses of each group member which eased the communication more. They were able to communicate more easily since they were more comfortable with one another. This will help the educators to provide their students the leeway to express themselves and be able to create their writing in a way that meets the expectations (Elboshi, 2021).

For collaboration, the students discussed very rarely with their group members about the three main ideas by using proper sentences in Week 3. However, in Week 6, it was noted that the students identified some supporting details by using proper sentences with their group members occasionally. When they wanted to indicate a proper topic by using proper sentences, they discussed it frequently with their group members. More collaboration was shown in Week 12, in which the students discussed very frequently with their group members to ensure that they would be able to organise the elements of a written work by using proper sentences and make the written work flow by using these proper sentences. The students were able to collaborate more frequently with their group members because they were able to know each member's contribution to the group tasks. Al Hilali and McKinley (2021) remarked that collaborative writing resembled a group effort, in which each group member, upon completing his or her task, passed the document to the next member to contribute to the document with his or her part of the writing. By doing so, the group members helped one another by reviewing the parts that they had done and provided feedback to improve their writing

In respect of creativity and critical thinking, the students were able to use their prior knowledge to recall the usage of grammar components very rarely in Week 3. They could also understand very rarely the usage of grammar components from the notes and discussion by providing concrete answers to the questions. Slowly in Week 6, the students were able to apply the appropriate grammar rule in a written work. They were also able to use their prior knowledge to recall occasionally the usage of vocabulary elements. In Week 9, the students were able to understand the usage of the vocabulary elements from the notes and discussion by answering some questions. They were also able to apply the vocabulary features frequently in the written work. The students showed tremendous progress because in Week 12, they were able to analyse the grammar components and evaluate the different usage of grammar components very frequently in the written work. Furthermore, they were able to analyse the vocabulary components and evaluate the different usage of vocabulary components very frequently in the written work. This shows that the students were able to develop creativity and critical thinking skills as they learned all the grammar and vocabulary elements to be applied in their written work. Dumitru and Halpern (2023) elucidated that there is a need to include critical thinking in education, especially in language education, to cope with the challenging demands of the job scope and it is a fundamental step to navigate the future of work and workforce. This will help the students to think out of the box instead of blindly studying and recalling by regurgitating the information from what they learned.

Document Analysis Checklist

A total of twenty-seven (27) students' written work was checked. The students were required to do their individual written work after they did their group tasks to ensure that they learned from their group to improve their writing. The document analysis checklist encompassed 11 items, and each item was divided into "done", "pending" and "not applicable". The items were divided into three themes such as content, organisation and language.

For content, the findings disclosed that in Week 7 of the semester, from the first individual written work, it was found that the students were able to create some main ideas to write a complete written work even though some struggled with it initially regardless of the writing genre after exposing them on how to construct proper main ideas. It was noted that the students were able to differentiate between the main ideas and the elements of a written work when they constructed their write-up. Some of them got confused by identifying the wrong main ideas, but after providing them with more group tasks, they were able to do so individually. The students were able to write a good theme from the writer's message properly after being scaffolded by their group members. Moreover, from the second individual work, the students were able to write an appropriate introduction in the first paragraph, the content in a written essay, and a conclusion paragraph in the last paragraph in Week 10. Thus, it is pertinent to maintain the needs analysis to investigate the contextual factors that influence writing (Al Hilali & McKinley, 2021). This is because the workplace writing has produced a socialisation process. Therefore, students would need to be instructed on how to acquire the knowledge specific to the workplace after transitioning to a professional environment.

With regards to organisation, from the third individual work, the students were able to organise their paragraphs by including the elements of a written work in Week 13. Pertaining to language, the students were able to use the tenses correctly, as well as use logical and sentence connectors effectively to link their ideas. It was also found that the students were able to use different types of sentences, such as simple, compound and complex sentences correctly. Lastly, the students were able to apply expressive words appropriately. By using the proper language elements, the students were able to make their written work more exciting and significant to be read. Practical guidance for improving English language proficiency among the students could be done. This is because the workforce highlights the significance of ongoing education and growth (Rahmawati & Mege, 2023). By putting resources into language enhancement initiatives and cultivating a culture of language skills, workforce employers and employees can enhance their ability to adjust to changing industry trends and efficiently manage the intricacies of global challenges.

The results revealed that the students were able to use their creativity and critical thinking to use the elements of content, organisation and language to construct their ideas accordingly. They were also able to capture the readers' attention by using the elements to make the written work have an impact on the readers by using concrete points and evidence, as well as involving them in the text. Creativity and critical thinking would be important to shift from being self-directed to being beyond the basic competence skills and expanding the learning opportunities to develop proficiency and accept learning as a life-time process (Kapkir, 2024). By doing so, the students would be able to take their past experiences as a basis to form better advancement.

CONCLUSION

This study reveals that each tertiary student would need to master his or her professional writing skills appropriately as he or she prepares for academic success and future careers. Moreover, effective written communication is essential to enable students to articulate ideas clearly in their assignments, research papers and projects in professional settings. This research elucidates the pivotal role these skills play in developing academic performance, nurturing career readiness, and encouraging personal growth. In this digital era, the ability to write professionally safeguards clarity, reliability and flexibility in various contexts. Consequently, integrating appropriate approaches to teach a professional writing course is vital to prepare students for the multilayered challenges of the modern workplace and to authorise them as competitive communicators to achieve diverse success in their lives.

LIMITATION, RECOMMENDATIONS AND IMPLICATIONS OF THE STUDY

The main generalizability of this study is limited by the lack of personal details of the nine (9) participants, like their age and background. Although they were all undergraduates, some may have worked previously, while some were those who enrolled in the course straight from school. Those who have worked before may have more experience in writing the assignments. Additionally, their family background could affect their performance in these assignments. Those from the cities are generally better in English compared to those from the smaller towns.

There was also no breakdown of the participants' age and ethnicity, which could also affect their performance in the course. Future studies could include the demographics of participants to ensure the study setting is explained.

Based on the findings of this study, it can be summarised that higher education institutions would need to incorporate different and new teaching styles in the professional writing course, according to the present atmosphere, to ensure students can improve their writing skills. Thus, utilising the main 4Cs of 21st-century learning skills would be another effective approach to enable students to do their writing practices with their group members through the integration of a technology platform.

This study emphasised of the four main skills of 21st century learning to develop the professional writing course among tertiary students in Malaysia. Therefore, there are a lot of chances for further researchers to include different non-conventional approaches in assisting tertiary students to improve their writing skills. This would be pivotal before they embark into the workforce self-assuredly.

Other than that, future researchers could include artificial intelligence together with the 4Cs of 21st-century learning skills to enhance writing improvement and motivation for tertiary students nationwide. Well-structured teaching styles and writing materials are essential to enhance student learning outcomes and foster effective writing skills. It is also tailored to the needs of students to bridge gaps in understanding, motivate engagement, as well as build competencies necessary for the academic world and professional success.

The implications of applying the main 21st-century learning skills and artificial intelligence technologies are reflected in the past studies. The communication and collaboration skills in professional writing enable students to comply with the demands of the current and upcoming working atmosphere. This means that effective communication and collaboration are appreciated. Apart from that, students would need to critically and creatively deliver their ideas, which is monumental to achieve success in their working career. Secondly, including the element of technology in teaching a professional writing course can assist students to minimise, as well as create minimal errors in assignments and documents. When they practise doing it, they will be motivated to write effectively because it also helps to develop their creativity and critical thinking.

On the other hand, educators and lecturers at the tertiary levels would need to guide their students appropriately, as this approach also has its drawbacks. Without proper instructions, students may become unduly reliant on the technology, which could hamper their own capability to progress independently in writing skills. Additionally, improper application of technology may give rise to moral dilemmas, such as plagiarism and academic dishonesty. However, incorporating technology facilitates teamwork, which may lead to more inventive and dynamic writing styles. This can also help students develop a better understanding of the subject matter.

Accordingly, there is a potential for enhancing professional writing skills to tertiary students by combining 4C's skills with technology. By putting into practice careful suggestions, educators can gain the benefits of this amalgamation. On the same trend, identifying the possible implications enables the students to improve not only as skillful writers but also as independent thinkers in a rapidly growing academic and professional setting.

AUTHOR CONTRIBUTION

RR and HCM searched for relevant articles, carried out the study and analysed the data. They also contributed their ideas and revised the manuscript by providing relevant ideas.

DECLARATION OF STATEMENT

The main author of this paper approves that this manuscript is original and precise. This manuscript deliberates the findings of the study correctly without overlooking any important data. The results have been elucidated according to the inputs from the participants.

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CONFLICT OF INTEREST STATEMENT

The authors have no conflicts of interest to state. All co-authors have read and agreed with the manuscript's inputs and there is no financial interest to report. We confirm that the submission is our original work and is not being considered for another publication.

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