PROCEEDINGS OF THE NATIONAL CONFERENCE ON ENGLISH LANGUAGE EDUCATION AND RESEARCH IN THE NEW NORMAL:

PROSPECTS AND CHALLENGES

WELCOME REMARKS

Dear teachers, researchers and educational practitioners,

Contemporary language education has undergone drastic changes under the impacts of the Covid-19 pandemic and its lingering aftermaths. This challenging time has required all educational stakeholders to devise instantaneous measures to tackle the emerging physical, psychological and cognitive constraints, particularly the issues and contingencies resulting from teaching and learning in the distant mode. Numerous adaptive solutions and innovative approaches have been brought to the fore by teachers, researchers and practitioners globally and locally to ensure the quality of language education and provide ongoing language support for learners.

In this context, the national conference 2022 on "*English Language Education and Research in the New Normal: Prospects and Challenges*" is co-organized by Ho Chi Minh City University of Economics and Finance (UEF), Agency for Southern Affairs of Ministry of Science and Technology (ASA-MOST), and HUTECH University (HUTECH). This conference focuses on, but is not limited to, approaches to teaching and learning in the new normal, the utilization of technologies and digital learning, affective dimensions in ELT, and other sub-themes in English linguistics and applied linguistics. Over 25 high-quality papers selected for inclusion in the conference proceedings offer thorough discussions on these issues drawing on both experiential, secondary and empirical data. These papers concisely reflect current practices and undoubtedly provide both theoretical and practical implications for English language education in this changing period.

As organizers of this conference, we are indebted to the teachers and researchers who have contributed their insightful papers to the conference proceedings. We wish you and your family excellent health and every success in your academic career. Although we have endeavored to ensure the quality of the contributions through a rigid peer review process, all authors reserve their right and responsibility over content of the manuscripts.

Ho Chi Minh City, June 18th, 2022

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THE REQUIRED COMPETENCIES OF ELT STUDENTS IN WRITING AN UNDERGRADUATE THESIS IN LIGHT OF THE 4Cs' 21st CENTURY

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ABSTRACT

Writing an undergraduate thesis may become a challenge for ELT students as newbie researchers. Therefore, they have to anticipate them by having some required competencies discovered in this study. This research article explored eight Indonesian ELT students' alumni writing their thesis within one and two semesters, particularly their required competencies. They reported their essential competencies to accomplish their thesis writing in a zoom interview. Their interview results were clustered with the 4Cs' 21st-century skills consisting of creativity, critical thinking, communication, and collaboration. The reported competencies indicating creativity skills (4C1) include practicing, implementing, elaborating, innovating, modifying, composing, and demonstrating. Next, the explored competencies representing the critical thinking skills (4C2) cover thinking, sorting out, associating, synthesizing, investigating, interpreting, reflecting, and proving. Meanwhile, the testified competencies demonstrating communication skills (4C3) are listening, communicating, understanding, instructing, motivating, and informing. Finally, reported competencies representing collaboration skills 4C4 involve interacting, cooperating, discussing, contributing, managing, and overcoming. The finding can be the basic knowledge for the ELT students to write their thesis successfully. The interview results were categorized into the 4Cs because these ELT students performed the 4Cs during the writing undergraduate process, although they or their supervisors might not be aware of the 4Cs.

Keywords: *creativity, critical thinking, communication, collaboration, undergraduate thesis writing*

1. INTRODUCTION

As novice researchers from many countries, undergraduate ELT students still have many problems writing their thesis. For example, the Pakistan students cannot formulate their research topic (Ameen et al., 2019), the Malaysia and Iran students cannot write the introduction section of their project reports (Maznun et al., 2017), and the Poland students cannot cite the reading text (Trepczyńska, 2016). Particularly for the Indonesian ELT students' writing thesis problem, the lexical and syntactic signals used in their undergraduate theses differ from the Swales' CARS model (Indrian & Ardi, 2019). The Indonesian ELT students still have problems with rhetoric awareness toward English writing convention because they still maintain their culturally local inductive style and the circular idea of the paragraph (Usman et al., 2018) and use metadiscourse markers limited to the use of 'and, or, also, but' (Agustinos et al., 2018).

The capability to write an undergraduate thesis for the ELT students is required to overcome the possible challenges (Imafuku et al., 2015; Kortz & Kraft, 2016). The appearing trials in the process of writing undergraduate consist of critical appraisal and synthesis of evidence, formulating research questions and study design, data analysis and management, research-specific skill, resources and time management, self-directed learning, and communication

(Imafuku et al., 2015). Kortz and Kraft (2016) amplify that the ELT students should possess the capability of analytical thinking, communication, presentation, science/content knowledge, time management, and organizational relationship-building skills to establish their undergraduate thesis writing experience well. All these skills appear in writing an undergraduate thesis one after another. Dwihandini et al. (2013) and Lestari (2020) pinpoint that ELT students need to have adequate English competencies, time management, effective academic and critical reading, research report writing, and writing before writing their thesis attending undergraduate research workshops to sharpen research and writing skills.

Next, the mandatory capability of writing an undergraduate thesis include critical thinking (Allison & Miller, 2018), integrated writing, academic writing, effective writing (Blankenstein et al., 2019), and integrated research skills (Antonou et al., 2020). Next, the ELT students should possess problem-solving skills, collaboration and interaction skills with experts, peers, faculty, community members, and teamwork. These are also practical skills for ELT students (Camacho et al., 2016), besides the content subject of their research. According to Oberne (2015), these capabilities can be trained in an undergraduate research course to learn analysing and synthesizing knowledge, data type and process, research and data type management, and analytical thinking skills.

A self-directed and autonomous person belongs to the capability aspect of writing accomplishment. Therefore, what is meant by an autonomous person is a person who can work without primarily being helped by others, and thus, it is independence and having the power to decide. Some characteristics mark an autonomous person; the ability to engage in self-directed learning has a state of psychological readiness. Thus, autonomous research students manage to move along a continuum from dependence to the independence of their thesis development process. Their supervisor and lecturers should prepare this value by encouraging them to critically reflect on how they deliberate to start the thesis (Greenbank & Penketh, 2009).

To be prolific writers, undergraduate ELT students have to receive adequate training in academic reading and writing and communication well in oral and written form with their lecturers and supervisors, who are also expert researchers. Therefore, the students can be engaged in scientific writing published in reputable journals after cooperating with their supervisors (Smith, 2016). Their creativity, critical thinking, communication and collaboration emerge after the experiment of publishing the research paper with their lecturer. The lecturers/supervisors and the students' engagement in research can develop students' understanding, grow students' enthusiasm for learning and schooling, inspire students for postgraduate study, develop students' skills beneficial for employment, and increase undergraduate research activities. Hajdarpasic et al. (2013) argue that academics' engagement is critical in making higher education 'higher' and effectively increases the value of academic writing and research to undergraduate students.

The cases in many countries about the undergraduate thesis issue have a similar sense that writing an undergraduate thesis or academic writing has been problematic for native and non-native speakers. Consequently, many researchers were attracted to research the capabilities and activities of writing a thesis (Antonou et al., 2020; Camacho et al., 2016; Hajdarpasic et al., 2013; Imafuku et al., 2015; Greenbank & Penketh, 2009; Kortz & Kraft, 2016; Oberne, 2015; Smith, 2016), although none connects with the 4Cs 21st-century skills. Therefore, I was interested in linking this research result with the 4Cs, which consisted of creativity, critical thinking, communication, and collaboration.

The 4Cs were selected in this study because the participants of this study, as the millennial graduates, were required to possess creativity (4C1), critical thinking (4C2), communication (4C3), collaboration (4C4) in their life, career, learning, innovation skills (P21, 2007, 2009, 2019), and also "lifelong learning" and "learning-to-learn" competencies (Voogt & Roblin, 2010) to catch up with the increasingly developing technology in the global workforce (Afandi et al., 2019; Erdogan, 2019; WEF, 2015). Their undergraduate thesis writing indicated they had performed the 4Cs (Erdogan, 2019; Pardede, 2020; Scott, 2015; Soland et al., 2013), although the participants or their supervisors may not have been aware of executing the 4Cs. Thus, this article intends to explore the required competencies of the ELT students in writing an undergraduate thesis traced back to their past work writing an undergraduate thesis, and further is measured by the 4Cs.

2. METHODOLOGY

The data analysis of this study is criteria content analysis or CCA (Miles et al., 2014). This research design is a qualitative thematic descriptive (Phillips-Pula et al., 2011; Reiners, 2012; Sundler et al., 2019) through in-depth interviews under the case study design (Kekeya, 2021). The design was aimed to uncover the competencies of writing an undergraduate thesis which the eight participants experienced through Zoom in-depth interviews. The audio and video results of the interview were recorded to gain and explore the qualitative data based on the social science research method (Cresswell & Cresswell, 2017; Miles et al., 2014; Neuman, 2007). The context of this study is higher education in Indonesia.

This article investigated the interview of the ELT alumni as the purposive sampling who were purposively selected from the Universitas PGRI Adi Buana Surabaya, Indonesia. It is a private university in Surabaya city of the East Java Province, Indonesia. The source of information was taken only from the eight participants of the alumni of ELT students of the Universitas PGRI Adi Buana Surabaya, Indonesia. The head of the English department recommended that these alumni graduate in the years 2020 and 2021. They were three males and seven females. Their ages were twenty-two to twenty-five. The non-ELT students were not nominated for this research because they usually write their undergraduate thesis in Indonesian.

This study observed the capability or skill of how the participants wrote their thesis. The eight participants had completed their undergraduate thesis and thesis defense in this regard. The investigated aspects were not on the thesis output but on how they processed their thesis writing and revised their thesis until completed. Lastly, the reported skills were clustered by the 4Cs' 21st-century skills, which were synthesized from the works of Erdogan (2019), Pardede (2020), Scott (2015), and Soland et al. (2013). The synthesized 4Cs consist of creativity, critical thinking, communication, and collaboration. Each skill has different skill indicators or head verbs to explain the related scale.

Creativity skill (4C1), critical thinking skill (4C2), communication skill (4C3), and collaboration skill (4C4) have 15, 13, 10, and 9 skill indicators or of skills, respectively. Thus, each skill has many indicators or head verbs, which could be the similarities and collocation to one another. Creativity skills are indicated by *imagining, adopting, imitating, memorizing, practicing, implementing, combining, elaborating, innovating, modifying, composing, creating, designing, demonstrating,* and *taking time.* Critical thinking skills are categorized as *thinking, asking, accessing, sorting out, associating, synthesizing, investigating, evaluating, inferring, interpreting, reflecting, proving,* and *arguing.* Meanwhile, the communication skills are

explained by *listening, understanding, communicating, writing, drawing, articulating, instructing, motivating, informing, persuading,* and the collaboration, including *interacting, cooperating, discussing, compromising, appreciating, contributing, managing, overcoming, preventing*. These head verbs were utilized to categorize the interview data into the 4C's, which functioned as a predictor.

3. DATA ANALYSIS TECHNIQUE

The in-depth zoom interview was applied in this study, and the results were recorded. The ten participants of this study used English and the Indonesian language during the interview to express the skills required for writing their thesis. Then I applied transcribing machines – Otter.ai and *Transkrip Instan*. The Otter.ai transcribed the recorded English language data and *Transkrip Instan* for Bahasa Indonesia data into a manuscript. Next, I rechecked and synchronized the machine manuscripts with the video record three times to get the final manuscripts. The final manuscript was analyzed with the content category analysis or CCA. The content data analysis passed through many steps under the principles of content category analysis CCA approach (Miles et al., 2014) through a three-stage process – comprehensive, topical oriented, and hypothesis-oriented (Mackey & Gass, 2005), and also the final process is *qualitative criteria analysis* (Elo et al., 2014). Further, the coding category was *Exploratory-Provisional coding with case-oriented strategies* (CAS), as proposed by Miles and Huberman (2014). All these were the theories based on how the data were analyzed.

The in-depth zoom interview analysis process technically passes through many stages to find and interpret the data. I did the following activities, respectively.

1. Rechecking the machine's transcription result with the video recording three times.
2. Synchronizing the checked transcription with the research questions.
3. Coding the complete interview data transcription with the content-coding system
4. Organizing the coded content.
5. Recapping and numbering the similar coded contents based on the 4Cs.

Next, I analyzed the in-depth zoom interview transcription regarding the capabilities of writing an undergraduate thesis. Further, I clustered the analyzed data based on the synthesized 4Cs' 21st-century skills – creativity, critical thinking, communication, and collaboration (Erdogan, 2019; Pardede, 2020; Scott, 2015; Soland et al., 2013).

The stages above are the fixed basis data for the report in the finding and the primary source of content data for interpretation presented in the discussion. The gained data, referred sources, data calculation, and graphics were processed by supporting software - MS office student 2019. The graphics and tables were processed by using MS Office Excel. The above data analysis took one month to finish. Henceforth, the data founds were the result of my analysis as presented in the charts.

Since the interview records were also in Bahasa Indonesia besides English, I translated the Indonesian transcription before the transcripts were rechecked and coded. It was finished before the data were coded. The translation into English was to assure that the content-coding, interpretation, and categorization were linear in that they had the homogeneity data in terms of language, but they were heterogeneity in data variants. Thus, the process went on track to avoid bias. In addition, the translation process was repetitive to avoid the distorted translation before being analyzed.

4. FINDINGS AND DISCUSSIONS

In this study, the eight participants reported that their competencies in writing an undergraduate thesis were clustered with the synthesized 4Cs' 21st-century skills. Therefore, the supervisors/lecturers and ELT students can prepare their competencies to write their thesis well. Following the 4C's, they resulted in the creativity of undergraduate theses in the following figure:
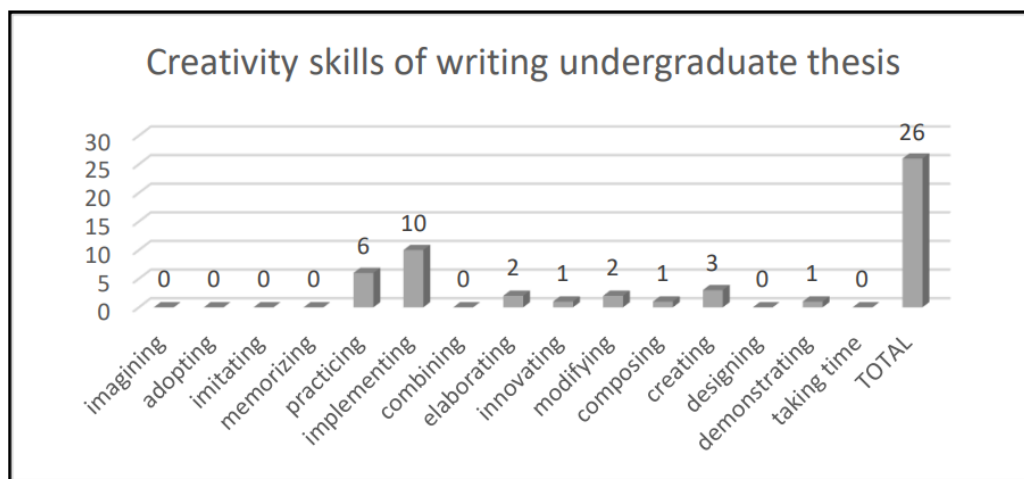

Figure 1. *Creativity skills for writing an undergraduate thesis*

The creativity skills of writing an undergraduate thesis reported by the participants include *practicing, implementing, elaborating, innovating, modifying, composing, creating,* and *demonstrating.* The total reported skills were 26 head verbs or skills. The three most dominating skills are *implementing* repeated ten times, practicing ten times, and creating three times. Thus, to anticipate the creativity skills in writing an undergraduate thesis, the students are highly demanded to practice academic reading and writing, apply advanced writing skills, develop good sentences and paragraphs, improve thesis content, create ideas after reading resources, and exhibit research findings.

All the finding activities indicating creativity skills above managed to counter the ELT students' problems in formulating their research topic (Ameen et al., 2019), writing the introduction section (Maznun et al., 2017), and citing the reading text (Trepczyńska, 2016), handling the thesis writing problem and local circular idea (Indrian & Ardi, 2019; Usman et al., 2018) and limited to use of 'and, or, also, but' (Agustinos et al., 2018). The findings of this article also paralleled the previous studies, such as integrated research skills (Antonou et al., 2020) and practicing research and writing skills Oberne (2015), although they did not link with one of the 21st-century skills. For that reason, the finding of creativity skills in writing undergraduate research could prepare any ELT undergraduate students to practice, implement, elaborate, innovate, modify, compose, create, and demonstrate all the created undergraduate thesis writing results that take some time and process.

The result of the eight participants' creativity skills is depicted in the following figure with 46 skills. These findings indicate that the research participants report that their critical thinking skills include *thinking, sorting out, associating, synthesizing, investigating, interpreting, reflecting,* and *proving.*
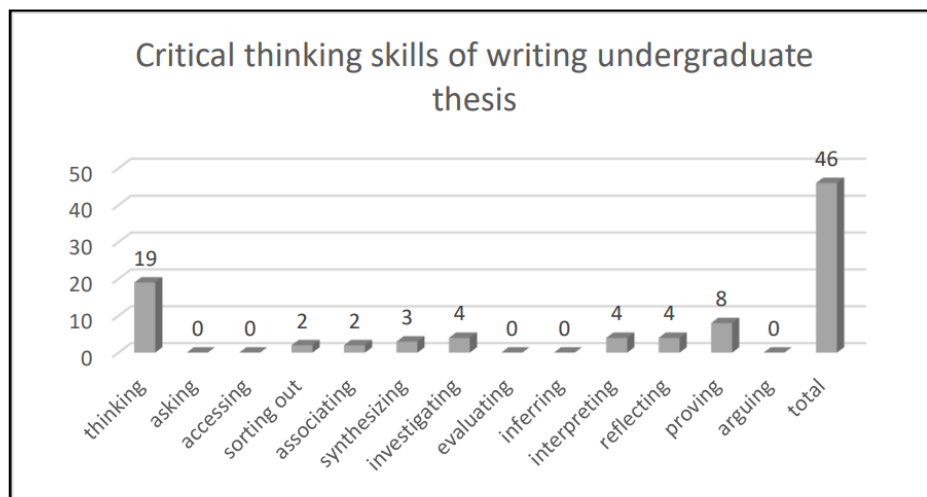
Figure 2. *Critical thinking skills for writing an undergraduate thesis*

The total reported critical skills were 46 times; the three most dominant skills were thinking repeated 19 times, *proving* repeated eight times*, investigating* four times, interpreting four times, and reflecting four times. The examples of critical thinking skills in writing an undergraduate thesis included believing (*thinking*) the importance of reading journals, organizing (*sorting out*) time management, connecting (*associating*) their findings to related theories, *synthesizing* the thesis references, *investigating* journals to find the gaps, shedding light (*interpret*) on new findings and strategies, reviewing (*reflecting*) articles, and demonstrating (*proving*) high motivation.

Among the other three skills - creativity, communication, collaboration, and critical thinking-managed to collect the total highest head verb, which means that critical thinking is an essential skill. The research outcomes indicating critical thinking supported the study of Imafuku et al. (2015) that the process of writing undergraduate consisted of critical appraisal and synthesis of evidence, formulating research questions and study design, data analysis, and management (Imafuku et al., 2015). Besides that, this study's finding correlated with the finding of Kortz's and Kraft's study (2016) that the ELT students were highly required to possess the capability of analytical thinking and content knowledge to complete their undergraduate thesis writing. In addition, Dwihandini et al. (2013) and Lestari (2020) pinpointed that the ELT students needed adequate English competencies before writing an undergraduate thesis, such as compelling academic and critical reading and research report writing. However, just like the creativity skills, none of the previous studies linked their finding indicating creativity skills with any 21st-century skills.

The following is the outcome of the communication skills of writing an undergraduate thesis with 24 skills.
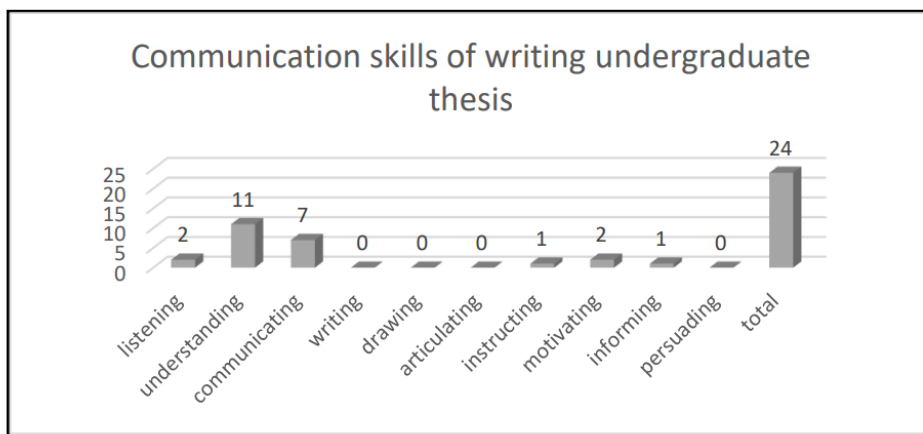
Figure 3. *Communication skills for writing an undergraduate thesis*

With a total of 24 skills, the reported communication skills of writing an undergraduate thesis included *listening, understanding, communicating, instructing, motivating,* and *informing*. Head verb *understanding* and *communicating* are the most dominating skill. The communication skills activities while writing an undergraduate thesis included *understanding* other's thoughts to avoid miscommunication, sharing (*communicating*) their insecurities with others, teaching (*instructing*) the research participant to express their opinions, encouraging (*motivating*) themselves to write a thesis, *informing* their direction to their research participants.

The research finding indicating communication skills in writing an undergraduate thesis was considered easy to be implemented after being clustered with the synthesized 4Cs' skills. The ELT undergraduate students can prepare well for the *listening, understanding, communicating, instructing, motivating,* and *informing* skills activities. Imafuku et al. (2015) and Kortz and Kraft (2016) reiterated that communication, presentation, and organizational relationship-building skills could succeed in writing a thesis. However, these previous studies did not correlate their finding with any of the 21st-century skills. Therefore, the findings of this study are considered easier to implement by any ELT students, particularly those from Asia.

Next, the results of collaboration skills in writing an undergraduate thesis are presented in the following chart.
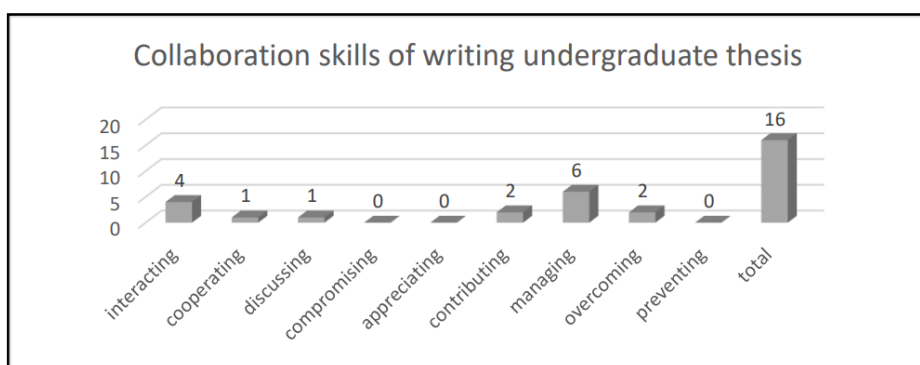
Figure 4. *Collaboration skills for writing an undergraduate thesis*

Figure 4 describes the collaboration skills of writing an undergraduate thesis with 16 total skills. These skills were collected from head verbs *interacting, cooperating, discussing, contributing, managing, and overcoming* with totally16 head verbs. The most dominating head verbs were *managing* repeated six times, and *interacting* four times. The communication skill examples of

the mentioned head verbs comprised collaborating (*cooperating*) with others to complete thesis writing, *discussing* their thesis, sustaining (*contributing*) their thesis commitment, *managing* to write their thesis successfully, and prevailing (*overcoming*) over their hardship.

Although the gathered result for collaboration skills was the smallest among the other skills – creativity, critical thinking, communication, and collaboration skills were well supported by many previous kinds of research (Antonou et al., 2020; Camacho et al., 2016; Dwihandini et al., 2013; Greenbank & Penketh, 2009; Kortz & Kraft, 2016; Lestari, 2020). Kortz and Kraft (2016), Dwihandini et al. (2013), and Lestari (2020) expounded that time management and organizational relationship-building skills could develop the ELT students' research and writing skills. Meanwhile, Antonou et al. (2020), Camacho et al. (2016), and Greenbank & Penketh (2009) reported that integrated research skills required collaboration skills such as problem-solving, relationship building, networking, and interacting with community members, interaction-related skills, and teamworking. Indeed, these skills were required skills for ELT students to experience their thesis writing well. Nevertheless, these previous researches did not correlate and arrange their finding with any 21st-century skills.

Last but not least, this study has provided handy tacit knowledge of the required competencies to experience the process of undergraduate writing well for ELT students, their supervisors, and any lecturers who teach research and research report writing. As a result, the university or college institutions could prepare proper facilities and infrastructure for the students and supervisors, such as sufficient undergraduate research workshops (Dwihandini et al., 2013; Lestari, 2020) to equip the ELT students' research and research writing report skills. Thus, the problem of writing a research report can be minimized and anticipated by undergraduate ELT students. Finally, the university and college institutions will be 'higher' because they effectively increase the value of academic writing and research to undergraduate students (Hajdarpasic et al.,2013).

5. CONCLUSION AND IMPLICATION OF THE STUDY

This study reports the skills of writing an undergraduate thesis clustered with the synthesized 4Cs 21st-century skills – creativity, critical thinking, communication, and collaboration. Amongst the four skills, critical thinking is the most highly required to be nurtured, followed by creativity, communication, and collaboration skills. The findings that indicate critical thinking skills include *thinking, sorting out, associating, synthesizing, investigating, interpreting, reflecting,* and *proving.* Next, the creativity skills of writing an undergraduate thesis include *practicing, implementing, elaborating, innovating, modifying, composing, creating,* and *demonstrating.* Following the creativity skills, the reported communication skills of writing an undergraduate thesis include *listening, understanding, communicating, instructing, motivating,* and *informing.* Finally, the collaboration skills as the supporting skill of writing undergraduate process comprise *interacting, cooperating, discussing, contributing, managing,* and *overcoming.* These findings are expected to help undergraduate students in Asia write their thesis better and more efficiently because it is embedded with the 4Cs 21st-century skills.

Especially for research and academic writing, lecturers and undergraduate thesis supervisors should prepare undergraduate research and thesis writing courses to train the undergraduate ELT students in analyzing and synthesizing knowledge, data type and process, research and data type management, and analytical thinking skills. Adequate training in academic reading

and writing and communicating well with the lecturers and supervisors enables the students to engage in scientific writing publications in reputable journals. Thus, their creativity, critical thinking, communication, and collaboration emerge after the experiment of writing a thesis and possibly publishing the research paper.

The lecturers/supervisors and the students' engagement in research can develop students' understanding, grow students' enthusiasm for learning and schooling, inspire students for postgraduate study, develop skills beneficial for employment, and increase undergraduate research activities. The process of converting from dependent to the independent researcher is not instant. As a result, the students can be psychologically ready to be self-directed and independent to complete their thesis writing process well. The supervisors' and lecturers' good deeds and merit cultivate this value by encouraging their supervisees and ELT students to critically reflect on how to start the thesis writing until it is finished deliberately.

These four interrelated skills – creativity, critical thinking, communication, and collaboration-can overlap, particularly in the extent of writing undergraduate experience in Indonesia. Besides that, since the participant of this study is only eight students from the same university, this study cannot figure out vividly the required skill pattern for writing an undergraduate thesis. However, at least it can shed light on the needed skills for writing the undergraduate thesis based on the 4Cs – creativity, critical thinking, communication, and collaboration. Thus, similar research should be conducted with more participants from different regions and countries because the results can be more various skills to experience an undergraduate thesis well. Thus, the problematic undergraduate thesis writing for native and non-native speakers could be anticipated by linking with 21st-century skills.

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