Writing skills deficiency in English for specific purposes (ESP): English for computer science

Dewi Sari Wahyuni[1]
Darmansyah[2]
Fetri Yeni J[3]

Universitas Negeri Padang[1,2,3]
email: dewisariwahyuni@gmail.com[1]
email: estigadarman2012@gmail.com[2]
email: fetri@yahoo.co.id[3]

Abstract – English for Specific Purposes (ESP) taught at Higher Education Institution (HEI) is a kind of course for students majoring other than English. The descriptive research conducted in one of HEI in Pekanbaru, Riau, involved 65 students majoring in Computer Science of that institution. The data gathered by observation and interviews. This research aimed to find out what were the causes of students' weaknesses in English writing skills, for those were the primary problem that they have compared to other English skills. It was revealed those students had; 1) low competence in General English (GE) based on CEFR, 2) had a problem with writing, even in their first language, 3) tendency in taking advantage of Google Translate without further checking, 4) lack of knowledge on lexical choice, sentence construction and the structure of writing, 5) limited practising time and opportunity

Keywords: ESP, HEI, writing skills

1. Introduction

English for Specific Purposes (ESP) is learned by students of both English as Second Language (ESL) or English as Foreign Language (EFL) which is considered an important part of the English Language Teaching (ELT) field. This ESP is intended to fulfill students' specific needs that make it different from General English (GE).

In Higher Education Curriculum, English taught in other than the English Department is supposed to be ESP adjusted to its major in each department. The materials are provided to comply with specific language items needed for academic and professional purposes. ESP means having learning goals in a specific domain which the contents are intended to its learners' specific needs.

In Higher Education Institution (HEI) where the research was carried out (Pekanbaru, Riau), ESP was taught concerning Computer Science to 65 EFL students. The course was designed based on the Indonesian National Qualification Framework launched by the Minister of Education and Culture (MOEC, 2011). The terms were designed specifically for things related to computers and technology which involve skills; listening, speaking, reading, and writing. Among all of those skills, writing is the most difficult one acquired by students. While the three other skills are also important, the demands for written communication are escalated as students are expected to write their own abstract or even their whole thesis later on. This skill is also needed for their future career. However, 90% of these students faced difficulties in this kind of skill. In general, based on CEFR standardized GE given to these students, shows that was at the elementary level; 91% at A1 and 9% at A2.

English is part of general and basic subject and is offered for three semesters and categorized as ESP for Computer Science. This ESP was delivered by balancing four English skills; Listening, Speaking, Reading, and Writing. Among all those skills, writing skills was the most difficult one to be acquired by the students. Even in GE, writing is also considered perplexing and its structure, lexical choice, and sentence construction frustrates many low competence students. Conveying a message in written language requires accuracy and it communicates the thinking process which showing the memory, intellectuality, and verbal capability of its writer (Mahboob & Elyas, 2014; Fareed et al, 2016).

English for Computer Science is one of the crucial media for communication for students in its field and also essential for their career after completing their study. Writing skill is highly needed for documents; contract, report or proposal as well as email and other media used for communication especially nowadays when work can be done from anywhere. More and more people work at home and written as well as oral communication is the keys to being successful at work. Moreover, the language in computer mostly used English that whether the students like it or not, they have to deal with this wrote English at least at its terminology that connected with Computer Science. The written tasks should be adjusted with things related to the computer and its context. It is necessary to choose the appropriate lexical, sentence construction, and writing structure to have a well-written task. If the message conveyed by broken English can still be understood by its receiver in oral communication, it does not work in a written one. When students struggle with the basic structure, they will not able to organize meaning or to put them on a larger scale such as texts with specific themes (Zobel, 2004; Arancón, 2013; Andriani, 2014; Luka, 2014; Sari, 2018).

2. Method

The method used is descriptive research. The data were collected by observing and interviewing the students and the lecturers. The goal of this research is to describe the causing factors that hamper students in their writing tasks.

3. Results and Discussion

The observation and interviews reveal five factors that hamper students in acquiring writing skills. They are (1) students low competency at GE based on CEFR, (2) students had problems with writing even in their first language, (3) students' tendency to use Google Translate without further checking, (4) Students' lack of knowledge on lexical choice, sentence construction and the structure of writing, (5) Limited practising time and opportunity. Those factors above are elaborated as follows.

3.1 Students of competency at GE based on CEFR is low while materials required for the course should be in specific content which beyond students' competence level.

The CEFR standardized test conducted on these students showed that 91% of students were at A1 level and only 9% at A2 which means all of them at the elementary level. Meanwhile, to be able to digest ESP materials students at least should acquire GE in general for intermediate and advanced students or at least they have adequate competence in GE to go further with ESP (Dudley-Evans, 1997; Anthony, 1997; Andriani, 2014; Athanasiou et al, 2016; Sari, 2018).

Having learned English for Computer Science challenging for these students for their knowledge in GE was limited and they had to acquire specific language used regarding Computer Science. The materials used were hardly meeting the students' level. There are many course books for ESP, however, the ones with specific needs of these students' major were limited and even though they were there, they tended to be outdated for the field of computer science have rapidly developed (Luka, 2014; Athanasiou et al, 2016) Therefore, lecturers compiled their materials form authentic materials which, in fact, beyond what could be attained by students' considering their competency and worked hard to simplify them to meet the level of the students.

Among all of those four English skills that students struggled with, writing was always be the lowest skill they could attain. Their low competence level at GE did not help much in writing, let alone to write in specific content as ESP for their major.

3.2 Some students were having a problem with writing, even in their first language

It has been said previously that among the four skills, writing skill is the most difficult one for these Computer Science students. Not all students have a talent in writing; even they had difficulty in writing in their first language. This happened to 46% of students and it was reflected from the tasks assigned to other subjects in the form of paper written in the Indonesian language. This lack of capability in expressing their thoughts in their first language led them to be more frustrated in thinking about what should be written in English. Having problems with the idea of things to be written and their lack of competence in GE, they tended to write in short and very simple broken English sentences.

The following are some excerpts taken from students' translated comments:
Speaking is better than writing. Writing for this class is very hard. I don't know what to write in Indonesia. How can I write in English?
I can speak and I can read, but I cannot write. Reading is the easiest for me.
Listening is also difficult, but writing is the most difficult one.
I don't like English. I don't understand it. It's not easy to write tasks in Indonesian and it's even harder to write them in English.
I know the vocabulary, but it's hard for me to make it into sentences and paragraphs in English.

Those comments above describe that writing is not favourite activity in this ESP class. In the first comment and the second comments, students claimed that writing is the most difficult one to do compare with listening, reading, and speaking. The first admitted that this student did not have an idea of what to write in English, especially for the determined specific

content. It was challenging to organize things to write in Indonesia and automatically, it was certainly not thought-provoking to do it in English with such limitation.

The next comment is also showing complain that writing in English was much tougher than it was in Indonesia, mainly because the student had a problem with writing itself and was not motivated by acquiring English skills as a whole. The last one showed that the said student had acquired vocabulary, however, organizing and connecting them into a writing task was troublesome.

3.3 Students' tendency in using Google Translate without further correction

There is nothing wrong with utilizing digital tools like Google Translate. It eases students to find vocabulary that they need all at once acknowledging their meaning so that they may understand what they write. Using this Google Translate application helped them in comprehending the discourse in reading. However, the convenience served by this application had made them looking for a shortcut and ignoring the effort required to earn good results for a writing task.

To make it worse, these students as digital natives, are inclined to use google translate without willing to recheck the lexical choice or pay attention to grammatical rules. The common practices were; 1) They wrote in Indonesian language and copied it to google translate and got the translation to finally offhand copied the translation to their task paper, 2) They wrote in Indonesian, copied it to Google Translate, got the translation in English afterward and then re-translated it into Indonesian to finally translated again in English. Sometimes, they did the re-translation 3-5 times. 3) they directly wrote the Google translate application and copied the whole part of their task paper. For students who were facing problems in pouring their thoughts even in their first language, their writing turned out to be messy.

Such practice ignores efforts that should have been done by students in terms of writing, for writing are a never-ending process and they counted on the tool to process it wholly. Students did not consider that this skill would benefit them as they just fulfilled their obligation to do the writing tasks which are inappropriately considered as a burden.

3.4. Students' lack of knowledge on lexical choice, sentence construction, and the structure of writing

Even gifted students with writing skills in their first language had to think harder about what they should write in English by considering the lexical choice, sentence construction, and writing structure for the Indonesian language have different ones. Therefore, these students often did not reach what they want to write. Although they were able to compose an idea on an assigned topic in their first language, they just did not know how to convey it in English. This leads to demotivating them in acquiring writing skills.

> I have many ideas on a topic assigned. I can write it in Indonesian. When I translate it into English, I just feel that it's not right. And I can't write it directly in English. Transferring my thoughts directly in English had me stumble upon completing my tasks. The pattern in English is not the same with Indonesian.

> I am interested in the topic given most of the time as they are connected with my area of speciality. The problem is I am hopeless because I have to write it in English. English grammar confuses me. My sentences turned upside down and I did not understand what I have written.

Choosing the inappropriate lexical will impact on meaning and the message that a writer wants to convey. As students were at the elementary level and demanded to write as HEI students who were not supposed at their existing level, they stumbled upon the tasks, although they knew and were familiar with the assigned topic and able to do so in their first language.

3.5 Limited practising time and opportunity

English was just a basic general subject with a limited 100 minutes of classroom time of 16 meetings in three semesters. The second and twelve meetings were for quizzes and the

ninth and the sixteenth meetings were saved for Mid Semester Test and Final Semester Test respectively. Practically there were only 11th effective meetings left and those are intended to facilitate four English skills instead of focusing only on writing skills.

To facilitate students to enhance their writing skills, they are assigned to do writing practices via asynchronous learning and the lecturers offered students to take their time for question and answer sessions and consultation outside meeting time. The problem was these students were too reluctant to take the session for being afraid to be judged and some also complained that they had too many tasks to do for other subjects that they hardly had time to practice the English writing as many times as possible before submitting their writing assignment.

Practising writing intensively and keeping on writing are suggested to improve writing skills. Feedback from peers or lecturers is needed, however, students can improve their writing accuracy without feedback by revising what they have written (Nagata et al, 2006; Sheen, 2007; Nagata & Nakatani, 2010) for one of the keys to success in writing is by writing more. Unfortunately, students objected to having peer feedback since they doubted their friends' competence, and having lecturers' feedback took time and courage for facing lecturers one by one. As English is only a General Basic Course, other subjects such as Expertise Courses were considered more important and taken seriously.

4. Conclusion

The problem that got in the way of students in this research to acquire writing skills adequately is rooted in the unmatched level of students' competence and material given. Having used in marketed course books will not be a solution, since most of them are for ESL students and even though it was intended for elementary, the material provided is still much higher than for these students' level. Mostly using authentic materials did not work either and incline to tempt students to take a shortcut to complete their writing assignment as soon as possible by using an application such as Google Translate. Students need to practice a lot in writing, both for communicating their thought in written form in their first language and English. Since time and the opportunity for getting feedback from the reliance ones such as lecturers are limited, there should be a solution to provide the opportunity to practice writing in a fun way and to get immediate feedback on their writing without the feeling of being judged.

References

Alharbi, A. and Alsolami, T. (2020). The effectiveness of corpora on Saudi EFL academic writing performance. Journal of Applied Studies in Language 4 (2), 331-345

Andriani, G. (2014) 'Problems in teaching English for Specific Purposes (ESP) in higher education', NOBEL: A journal on Literary Studies, Linguistics and Language Teaching, 5(01), pp. 30–40.

Anthony, L. (1997) 'English for Specific Purposes: What does it mean? Why is it different', On-CUE Journal, 5(3), pp. 9–10.

Arancón, P. R. (2013) 'The use of SFL genre theory for the analysis of students' writing skills in ESP', Revista española de lingüística aplicada, (1), pp. 245–262.

Athanasiou, A. et al. (2016) 'Aligning ESP courses with the common European framework of reference for languages', Language learning in higher education, 6(2), pp. 297–316.

Dudley-Evans, T. (1997) 'Five questions for LSP teacher training', Teacher education for LSP, pp. 58–67.

Fareed, M., Ashraf, A. and Bilal, M. (2016) 'ESL learners' writing skills: Problems, factors and suggestions', Journal of Education and Social Sciences, 4(2), pp. 81–92.

Lastari, NKH. and Saraswati, PRTAKH. (2018). The use of mind mapping to improve writing skill of the eighth grade students of junior high school. Journal of Applied Studies in Language 2 (2), 144-150

Luka, I. (2014) 'ESP competence assessment in tertiary education', Language for International Communication: Linking Interdisciplinary Perspectives, p. 101.

Mahboob, A. and Elyas, T. (2014) 'English in the kingdom of Saudi Arabia', World Englishes, 33(1), pp. 128–142.

Nagata, R. et al. (2006) 'A feedback-augmented method for detecting errors in the writing of learners of English', in Proceedings of the 21st International Conference on Computational Linguistics and 44th Annual Meeting of the Association for Computational Linguistics, pp. 241–248.

Nagata, R. and Nakatani, K. (2010) 'Evaluating performance of grammatical error detection to maximize learning effect', in Coling 2010: Posters, pp. 894–900.

Sari, F. (2018) 'The issues of ESP instruction for university level in Indonesia', Global Expert: Jurnal Bahasa   dan Sastra, 7(1).

Sheen, Y. (2007) 'The effect of focused written corrective feedback and language aptitude on ESL learners' acquisition of articles', Tesol Quarterly, 41(2), pp. 255–283.

Tuzlukova, T. and Heckadon, P. (2020). Gaining in-demand skills in the ESP classroom: a case study in Oman. Journal of Applied Studies in Language 4 (2), 210-225

Zobel, J. (2004) Writing for computer science. NY: Springer.

Zulfikar, R., & Putri, A.S. (2020). Web-based system for creative writing. Journal Of Applied Studies In Language, 4(2), 144-150. doi:10.31940/jasl.v4i2.1899