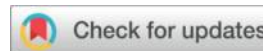




Applying Science Methodology of Artificial Intelligence on School Students in Writing Skills Testing Education

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Abstract

This study explored the use of AI in a foreign language (FL) writing by foreign language majors at Faculty of languages and translation, King Khalid University. The role of translation, and specifically online translation tools (OLT). The present study tried to document students' existing use free online translation (FOT) tools, and their views about these tools. The tools of the study involved video observations and questionnaires regarding FOT use. Twenty-one university students enrolled in a writing course. Follow-up interviews were done with the students who were observed using FOT tools widely on the video recordings. Results indicated those students have a primarily positive attitude toward FOT tools. In addition, most of students said that they use such tools frequently. Results are discussed in the context of the continuing debate over whether and how translation technology should be used in FL classrooms. These findings show the importance of providing teachers and students with instruction on (FOL), as well as the need for additional research on the effects of AI on writing acquisition.

Keywords

Artificial Intelligence, Elementary School Students, Free Online Tools, Translation, Writing Skill

The Development of Artificial Intelligence

Artificial Intelligence (AI) had appeared a long way since the presence of AI research in the 1950s when Turing developed the well-known Turing Test to inspect whether machines could think. Early trends in AI research displayed a philosophical difference between Weak AI and Strong AI. The vision of AI as a building system that can think like humans was known as Strong AI. Interchangeably, allowing systems to work without figuring out the difficulties of human thinking was seen as Weak AI (Marr, 2018). Strong AI has been thought as a threatening perception, since it aims to reproduce human intelligence and take over control from humans. The definition of twenty-first-century of AI has been reformed as follows: AI is "a science and a number of computational technologies that are inspired by—but usually operate quite differently from—the ways people use their nervous systems and bodies to sense, learn, reason, and take action." (Stone et al., 2016).

We do not have enough knowledge about the complications of human cognition to approximate it via machines. That being said, as research has progressed, it has moved beyond the perspectives of Strong and Weak AI. A third objective of AI is to build models based on human cognitive without the end goal of reproducing difficult human thinking (Marr, 2018). One such new development related to this third objective is the "partnership on AI to benefit people and society." This partnership was cofounded in 2016 by Amazon, IBM, Google, Facebook, and Microsoft to study how AI is being used, and to examine AI's influence on people and society. (Hern, 2016). By creating an open platform for discussions, this partnership sets up a type of transparency for studying the big influence of AI.

Stanford University showed a "100-year report on AI" in 2016. By providing historical documentation and future directions, this report released to examine eight factors related to AI, containing the factor of education. While AI provided great promise for language learning, the early work of AI lessened because of its limited ability to promote deep learning. Today, AI has permeated many aspects of everyday lives, from smart applications on our mobile devices to self-driving cars. (Stone et. al, 2016).

For a long time translation and language learning developed together as the grammar translation model used to teach languages, mainly for reading and writing knowledge was applied to the teaching and learning of languages. The separation between grammar-translation models and theories of foreign language acquisition resulted to the development of communicative teaching methods to language learning and teaching during the last half of the 20th century. This does not mean translation has disappeared from the classroom, however. Wilkerson (2018) shows that even when the instructor aims to use the target language, English is frequently used to translate classroom dialogue. While the place of the native language in the classroom language is the subject of continuing debate—see, for example, Rell (2015)—, mentioned that "the activities and teaching strategies outlined here are intended to encourage student reflection on the translation method and on the changes between languages and not to replace communicative learning and teaching in the target language".

While translation is inattentive from modern teaching methods, the training and profession of translation are alive. With globalization has come a bad need to translate texts ranging from employee handbooks to television programs. Also, advances in natural language processing and the increasing of the Internet have presented into the world of translation a new tool: Web-based machine translation (WBMT). The automatic online translators, including Google Translate, and FreeTranslation.com, were originally designed to give customers a basic translation of Web pages or short texts written in another language; and most center on the translation of English writings into other languages. Recently, however, WBMT has found a new user in the foreign language student. Williams (2016)

The Role of Translation in Language Teaching and Learning

Laviosa (2014) declares the reintroduction of translation as an educational tool in the FL classrooms in academic settings. She believes that the re-emergence of translation in the FL classrooms is easily justified in light of the current changes in FL teaching and learning methods and Applied Linguistics. According to her, cultural variety in today's globalized world and multicultural educational schemes has changed the relationship between culture— as a unified individual personality— and language learning. The use of L1 in FL learning environments is becoming more of a traditional method than two or three decades ago.

Web-based Machine Translation (WBMT) in the English Language Classes: Problems and Solutions

Language specialists are conscious of the deficiencies of all types of machine translation (MT), as expressed briefly in Barreiro and Ranchhod (2015): "the most clear failure of MT is that it is unable to render publication-ready text" (p. 3).

Williams (2016) quotes various examples of incorrect English-French translations produced by WBMT, all associated with problems of lexical vagueness and explanation of the source-language syntax. Nowadays we have transferred from immobile computers, which do not connect with one another, to an access of devices, big and small, which allow us to be in touch with each other simply and to belong to different digital networks that increase our everyday communication. Networked Learning (NL), understood in the sense of Jones, 2015, "Learning in NL is used to promote connections between one learner and other learners, between learners and teachers, between a learning community and its learning resources" (2015) has therefore appeared as an essential model. Within language learning and teaching.

Chapelle & Sauro (2017) indicates that "technology has become vital to the way that language learners in the world nowadays access sources in a foreign language, cooperate with others, learn inside and outside of the classroom, and take a lot of language exams." We can add that technology is common in every subject and level in learning and that it is essential for daily life. Our students accordingly use technology not only to learn a language, but to be better ready for upcoming challenges. For example, we use telecollaboration to bring learners together from different countries, but those learners are also learning how to practice tools such as video and chats, which are the tools they will use in their life responsibilities, for example, in distant working scenarios. Technology has provided the learner within bigger connected networks, and to transfer from traditional methods of teaching. This enables students to take responsibility and develop as independent students.

Mobile-Assisted Language Learning (MALL) used as a tool in the early 2000s with the arrival of mobile technologies. O'Malley et al. (2013: 6) define MALL as "any sort of learning that occurs when the student is not in a fixed, prearranged place, or learning that occurs when the learner takes advantage of the learning probabilities offered by mobile technologies." According to the 2018 Pew Research Center data (Pew research, 2018), 77% of the people in the US own a smartphone, 73% have a desktop or laptop, and 53% take tablets. This fast change in technology has corresponded to changes in how we understand language learning.

Sharples et al. (2010) suppose a strong correspondence between New Learning (personalized, learner-centered, cooperative, persistent, and lifetime) and New Technology (personal, user-centered, mobile, networked, persistent, and hard-wearing), both terms coined by the authors. They mention that mobile learning "can also be a chance to bridge the bay between formal and experiential learning, opening new prospects for personal fulfillment and lifelong learning," as we can move to learn outside of the classroom walls and into our everyday lives. With respect to language learning, Kukulska-Hulme et al., 2017, also state that apart from classroom walls, it is precisely this idea of hiding the lines between formal and lifetime learning that makes mobile learning valued. They also highlight that this new kind of language learning requires effective learning design, as well as more autonomy on the part of the learners themselves. Mobile devices have invaded our everyday lives and created a rich environment for joining through audio, video, and visual text. Nevertheless, teachers need to know how to join these resources optimally for language teaching and learning in an educational situation.

Some writers (Bozdogan, 2015; Burston, 2015) are doubtful about the capability of digital tools and apps to support language learning, especially when used in traditional settings with less opportunity for learner self-sufficiency. Much depends on educational intent and duty design when using these tools. Positive learning results are possible only when there is a strong plan between the educational goal and the appropriateness of the technology tool to accomplish this objective. They provide self-evaluation activities and auto-correction to make students conscious of their progresses and thus increase their motivation. They develop new ways to shape, share, and self-assess information about learning and teaching languages.

Lastly, mobile language learning also contains real-life apps since these can be used for reliable language learning. For instance, one can use the Twitter or Facebook apps to read first speakers' posts and connect easily with them, or listen to the radio from any nation where the foreign language is spoken. Learners can watch TV shows on Netflix or clips on YouTube also. The important issue for foreign language learning is how these sources from TV or YouTube are used as learner resources and whether the instructional design effectively strengthens language learning.

Usai et.al, (2018) "All of these apps have occupied the language learning field worldwide. For example, Duo lingo is a free language learning and teaching platform that supports strengthening of vocabulary, grammar, and pronunciation in 28 languages, and has over than 100 million customers in 2018. With such developments, there is a great chance for AI systems to inspire customized learning. What has changed fundamentally is the idea of customized learning."

Turovsky, (2016) states that "AI-based language translation programs for instance Google Translate have made big headway in helping foreign language and foreign language students on a large scale. Google Translate helps over 100 languages at various levels serves over 500 million persons daily. Given the persistent obtainability of this translation service, foreign language students are tapping into it to develop their learning beyond the schoolroom. Machine translation from Google which uses statistical machine translation not grammatical rules, has been condemned severely for correctness issues, however. More updated versions of Google Translate reported developments in the level of fluency and accuracy Google's switch to Neural Machine Translation is planned to translate whole sentences rather than brief expressions, and is expected to more improve accuracy. What are the applications then for foreign language teachers and learners? Although such improvements in translation technology concerns have also been raised about how the issues of grammatical accuracy in Google Translate could be affecting the learner's process of building proficiency".

Lovett, D. (2018) states that " Google Translate is probably the most widespread FOT tool and has been continually growing. Google Inc. has speedily enlarged the number of languages on its system opening with only three languages in September 2007 and currently supporting 90 languages at numerous levels and helping over 200 million persons every day. To judge whether FOT tools might be helpful or harmful to FL learners, the first step is to examine the effectiveness of FOT tools. Given that the purpose of FOT tools is to translate text from one language to another, their efficiency can be theorized by measuring the quality of the translated manuscript, how readable it is, and how it compares to another text translated by a human translator. Some studies have studied these topics over the years with results showing that although FOT tools are less precise than human translators, the production of FOT text is still clear to proficient readers, and its quality enhance post-editing."

To examine the importance of human beings, Niño (2018) matched translations made by learners with translations made by machine translation (MT), and translations done by MT and post-edited by students. She states that "student-edited production is significantly better than either unedited machine translation output or learner-translated output. The outcomes of these studies suggest that although machine translation is not completely perfect. When this text is post-edited, it becomes comprehensible and of higher value."

Teaching Writing to Foreign Language Learners (FLL).

Chapelle and Jamieson (2018) highlight that "Writing is an essential language skill for FLL. Teaching this skill effectively is of highest importance for EFL teachers. In spite of translation having been excluded as a teaching tool in EFL classrooms over the last few decades, it continues to be used by both students and teachers. The presence of translation in EFL classes has drawn attention to how translation, as a tool, can be most valuable in the teaching and learning of writing processes".

Within the field of language learning, writing in the FL is a crucial skill. Writing skills in one's first language (L1) can both help and hamper the process of learning to write in an FL. The role of one's first language (L1) in the second language (L2) writing. Based on work by Matsuda (2012) and others, there is no question that students' L1s are current in various degrees in their FL learning and writing activities in specific. Several studies prove that almost all FL writers use their First languages (L1s) while writing in the FL to a larger or lesser degree, depending on their ability level in FL.

In this study, using FOT tools, is the type of translation tool that is of highest interest. According to Hatim and Munday (2014), translation is “the process of transferring a written text from foreign language (FL) to the target language (TL), led by a translator, in a specific socio-cultural context.” Consistent with this definition, not only do FL writers use their L1 in creating FL texts, but they also translate in many cases to produce FL texts in the FL classrooms. Historically, the translation would happen with the help of a human translator or a bilingual dictionary. Currently, FOT tools are the most popular means of translating from the L1 while writing in the FL.

The Effect of Using (FOT) on Teaching and Learning Writing

In his doctoral thesis, O'Neill (2012) examined the quantitative and qualitative effects of FOT tool use on FL paragraphs. The research was done in the French Department, the University of Illinois. There were 3 groups; the first was the control group, which had no FOT tool training and was not allowed to use FOT tools. The second group had access to FOT tools but had no FOT tool training, and the third group used FOT tools and had FOT tool training. The applicants completed a reading pre-test, writing pre-test, two writing tasks, and a writing post-test. O'Neill then concludes that the quality of the texts produced by the participants who had used FOT tools was often better than that of the non-FOT tool users (p. 215).

Garcia and Pena (2011) applied research to find out whether MT can be used as a useful activity for improving the FL writing skills of beginner learners. The applicants were asked to complete two writing tasks, then asked to answer a two-question user satisfaction survey. Based on their findings, Garcia and Pena conclude that MT helps beginner FL learners communicate more and write better in the L2 by facilitating many relevant words.

Significance of the Study

This study explored the potential effect of Free Online Translation (FOT) tools in the process of FL learning and teaching. Specifically, after reviewing the significance of machine translation (MT) and free online (machine) translation (FOT) tools to the learning and teaching of writing skill, the study will inspect students' use of FOT tools, the tools' efficacy, and students' opinions of the tools.

As an EFL lecturer with more than two decades of teaching experience, I developed an interest in this topic when I noticed that the students would sometimes use FOT tools to translate words, phrases, and sentences from their first language into English or vice-versa. My interest grew stronger when other colleagues also assured that their students were using these tools to complete their writing tasks, in spite of continuous official warnings against using such tools.

The inquiry was developed against the background of decades of criticism to the use of translation in foreign language teaching and learning. This criticism pushed translation off the scene in language classes (see Larsen Freeman & Anderson, 2011). A fundamental change from written language and deductive teaching and learning of grammar to communicative language as a means of foreign language teaching. These ideas became known as the 'Reform Movement' (Howatt & Widdowson 2014, pp. 187-209), and as a great part of this movement, translation was pushed to the surface in foreign language teaching and learning. (Cook, 2010).

Objectives of the Study

The present study is proposed to contribute to translation research and to the teaching of foreign language in many ways.

First, the results of this study will build and expand on prior research documenting the use and educational effectiveness of artificial intelligence in the field of translation.

Second, the present study is expected to illustrate the effectiveness of FOT tools for a group of EFL learners.

Third, the results will provide a starting point for further investigations into increasing the effectiveness of students' FOT tool use, such as through training in appropriate FOT tool use for FL learners.

Finally, the study will contribute in useful and practical ways to the experience of foreign language teachers and learners to help them to understand the role of FOT tools in their students' foreign language writing and the reasons why their learners insist on

using these tools. By this knowledge, teachers can decide whether and how to let tool use in their classrooms, or even to combine the appropriate use of such tools explicitly into their foreign language syllabuses.

Research Questions

- 1- Do level three students in the Faculty of Languages and Translation, KKU resort to FOT tools while completing writing assignments? How do they use such tools?
- 2- Do level three students in the Faculty of Languages and Translations, KKU, use FOT tools effectively and efficiently in the foreign language writing classroom?
- 3- Are level three students in the Faculty of Languages and Translation, KKU, satisfied with using FOT tools for L3 writing?

Hypotheses of the study

Referring to the literature review and my observations, as described previously, three hypotheses have been prepared regarding the anticipated results of the study.

- 1- Level three students in the Faculty of Languages and Translation, KKU resort to FOT tools while completing writing tasks.
- 2- Level three students in the Faculty of Languages and Translation, KKU, use FOT tools more efficiently than effectively.
- 3- Level three students in the Faculty of Languages and Translation, KKU, are satisfied with using FOT tools for L3 writing.

Definition of Key Terms

- 1- EFL.
EFL is an abbreviation for English as a foreign language. It refers to teaching or learning English in a society where the tool of teaching and communication within the country is not English.
- 2- FOMT/FOT tools.
FOMT refers to free online machine translation. FOT refers to free online translation. The terms FOT tools and FOMT tools are used through the paper to refer to software accessible free of charge on the Internet that can be used to translate text from one language to another automatically.
- 3- FL.
FL in this study stands for foreign language.

Research Method and Data Collection

During present study, the researcher followed descriptive research by doing the following:

- 1- Observing and recording the behavior of Level three students in the Faculty of Languages and Translation while completing their tasks of writing.
- 2- Conducting questionnaires
- 3- Conducting semi-structured interviews in three continues stages.

The data collection lasted for 12 weeks in an English writing course taught by the researcher at the Faculty of languages and translation, King Khalid University, Saudi Arabia, in the first semester 2019/2020. The researcher got ethics approval from the Faculty before starting the study (see Appendix A). The general data collection had the following:

- a- Video Observation: To record the behavior of learners (If they use FOT tools while doing writing tasks). (twenty one applicants in the course of twelve weeks shared)
- b- Satisfactory questionnaire: To analyze applicants' views and attitudes toward using FOT tools in writing, twenty one participants finished the survey.
- c- Interviews: To collect more data from the learners who used FOT tools (based on the video observations) while performing writing tasks, 7 participants were interviewed.

The subjects of the study

Twenty one males Level 3 students at Faculty of languages and translation, King Khalid University. Aged between nineteen and twenty one. The researcher selected this group because their GPA last semester in level 2 in writing competence was moderate. This sample was used for the following reasons:

- 1- Level three students are required to write a complete and different types of essays in this stage their university requirements.
- 2- Level three students never received such type of training related to FOT tools.

Procedures

1- Writing Tasks

At the beginning of the course, the participants were informed about the research and trained in how to use the video recording. Then, for the researcher to observe and document the use of FOT tools in writing, learners recorded the completion of authentic writing assignments in computer-based language labs for twelve weeks. Next, at the end of week twelve, a satisfaction questionnaire was given to the participants to test their satisfaction with FOT tools. After collecting the data (videos), statistics were used to assess efficiency and effectiveness of FOT tools used in EFL writing by analyzing the quality of the learners' writing process and product. Lastly, interviews were carried out with those participants who used FOT tools in their writing. Nevertheless, since the objective of this study was to observe "normal" behavior (i.e., the use of FOT tools in writing exercises), conventional, individual in-class writing assignments were the resource of data. Also, at the end the course, participants were neither asked to use nor to leave the use of FOT tools.

- The first task (see Appendix B)

Participants were asked to write the two paragraphs (introductory paragraph and a body paragraph) of a cause-effect essay. They were permitted to use free online translation tools.

- The Second Task (Editing).

In the second writing task, the students were asked to edit an essay by fixing grammatical errors, vocabulary inaccuracies and general communication problems (see Appendix C). The task conditions were similar to those for the first task.

- The Third Task (Problem-Solution).

This task had two questions essay prompt (problem-solution) asking the students to write the introduction then two body paragraphs, one concerning the first question and the other addressing the second question (see Appendix D). The overall instructions were similar to the first two tasks.

- The Fourth Task (Compare-Contrast).

The students were asked to perform a compare-contrast essay about 300 words (see Appendix E).

- The Fifth Task (Advantages and Disadvantages).

Subjects were required to write a full essay of about 300 words titled the advantages and disadvantages of FOT tools for FL learners (See appendix F).

2- The questionnaire

A questionnaire was conducted to collect students' responses about their attitudes towards and use of FOT tools. Factual questions were given to find out who the participants are, as they inquire about demographic characteristics (e.g. age, race, gender, level of education, and occupation) as well as other background information that may be related to explaining the results of the survey. Behavioral questions were given to find out the students' actions, habits, lifestyles, and personal history. Attitudinal questions were given to find out what learners think, and typically ask about attitudes, opinions, beliefs, values, and interests (Dörnyei, 2010). Google Forms were used to build, collect, distribute, and analyze the learners' questionnaire (see Appendix G) that the subjects finished at the end of the period.

3- Semi Interviews

These interviews were called semi-structured for two chief reasons. First, only six students that actively (noticeably) used FOT tools in performing their writing tasks were selected to be the participants of additional observation through semi-structured interviews. Secondly, interview questions created a framework to guide the conversation in a way with research objectives. This, however, did not determine the interview outcome, as interview questions simply provided a structure for the conversation flow rather than a firm framework for the interview result. It was predicted that the dialogue could go in unexpected directions or some topics could result that were not planned when arranging the interview. As a result, interviewees were not only offered the freedom but also encouraged to give their own reflections throughout the interviews.

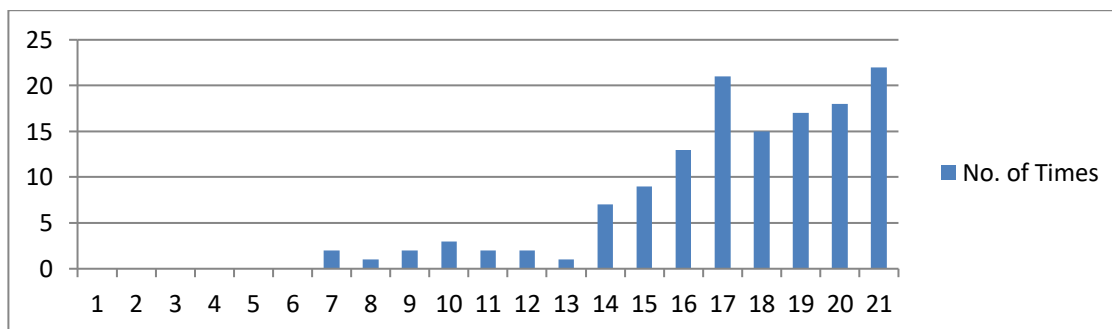
Data Analysis: The data analysis in the present study had three sections:

1- Observation Analysis (Quantitative).

Only 7 participants who actively used FOT tools and also completed surveys and interviews were observed in detail. Effectiveness and efficiency of tool use was examined. The quality of the writing tasks was evaluated according to three main criteria: First, the accuracy of the grammatical structure and vocabulary use. Second, the variety of the range of vocabulary and grammar. Third, the overall communication. To evaluate these criteria, the researcher assessed each task using the standard Can Test writing evaluation rubric (see Appendix C).

The videos which were recorded for the participants while completing their writing tasks were analyzed by the researcher to answer the first question of the research “Do level three students in Faculty of Languages and Translation, KCU resort to FOT tools while completing writing tasks, how do they use such tools?”. First, the number of trials that each learner used FOT tools while finishing their writing tasks was counted. The primary observation showed that six participants did not use FOT tools at all. Seven participants used FOT tools only once or twice this means (low-use). Eight participants used FOT tools approximately from 7 to 22 times this means (high-use) during completing the writing tasks that is approximately 32% of the students were categorized as “no users of FOT tools”, 30% as “low users of FOT tools”, and 38% as “high users of FOT tools”. Participants’ frequency use of FOT is shown in Figure (1).

Figure (1) the frequency of FOT use

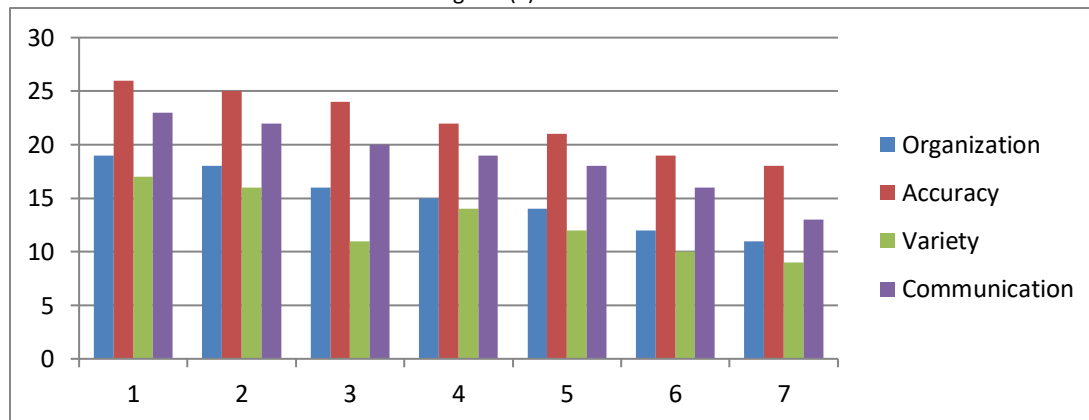


Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Number of Times	21	.00	22.00	6.4286	7.81391
Valid N	21				

The ways in which students reacted to FOT tools was perceived closely. The 8 students who significantly used FOT tools, 6 of them translated from their Arabic language into English only, and 2 students used both languages. They were translating words from their Arabic language into English (60%), translating expressions or phrases from their Arabic language into English (40%), and double-checking the meaning accuracy of words or expressions by seeing their meaning in their Arabic language (35%). Effectiveness and efficiency analyses were carried out for the 7 learners who were high FOT users and also completed the questionnaire and interviews. Participants’ effectiveness and efficiency in the use of FOT tools was analyzed based on video observations and the students’ final writing samples.

- To answer the second research question, “Do level three students in Faculty of Languages and Translations, KKU use FOT tools effectively and efficiently in the FL writing classroom?” the effectiveness of the students' use of FOT was supposed to be reflected in the quality of the end product of the writing tasks. The quality of the writing tasks was assessed according to three major criteria: first, accuracy (vocabulary use and grammatical structures), second, variety (range of vocabulary and grammar) and third, overall communication. The videos were observed carefully, marked, and analyzed to assess the effectiveness criteria see appendix (C). Because the current study has a small sample size (7) and of course one cannot expect that the distributions of parameters are ordinary, “the medium” is used as a measure of central tendency rather than the mean (Levine & Krehbiel, 2011).
- First, as for accuracy was defined as the degree to which the participants used proper English grammatical structures and vocabulary in their writing assignment using FOT tools. For each instance in which a participant used a FOT tool to translate from Arabic into English, the resulting linguistic section (word, phrase, or sentence) was coded as correct or incorrect use of English grammar and vocabulary. The total number of the correct translated sections was divided by the number of sections translated using FOT tools by each participant to compute the total accuracy score for every member of the group. Participants' accuracy scores ranged from 0.67 to 1, with a median of 0.74, representing that approximately 74% of the linguistic sections translated by students using FOT tools resulted in production of linguistic sections that were grammatically and semantically correct. See diagram (2).
- Second, the variety represents the extent the participant shows over different grammatical structures and vocabulary words. To evaluate variety, each linguistic section produced with the help of a FOT tool was observed using the Can Test Writing Assessment Grid (see Appendix C). Participants' variety scores started from 0.55 to 1, with a medium of 0.67, i.e., nearly 67% of the time that students used FOT tools. These FOL tools exceeded the variety of vocabulary and grammatical structures that the students can include in their written English assignments.
- Third, as for Overall communication, it referred to the use of FOT tools resulted in the linguistic parts that could be easy to understand and that “sounded and read” like English, or whether the use of these FOL tools requiring more effort of the reader to understand the meaning. Using Can Test Writing Assessment Rubric (see Appendix C). Overall communication median was 0.62, indicating that approximately 62% of the linguistic parts translated by students using FOT tools were mediated to read like. See diagram (2)



	N	Minimum	Maximum	Mean	Std. Deviation
Organization	7	11.00	19.00	15.0000	2.94392
Accuracy	7	18.00	26.00	22.1429	3.02372
Variety	7	9.00	17.00	12.7143	3.03942
Communication	7	13.00	23.00	18.7143	3.45033
Valid N	7				

2- Questionnaire Analysis (Quantitative).

To test the third research question, "Level three students in Faculty of Languages and Translation, KKU is satisfied with using FOT tools for L3 writing?" students were asked to do surveys evaluating their use of and

satisfaction with FOT tools. Twenty one participants in the present study (7 “no users”, 6 “low users” and 8 “high users”) completed surveys. Descriptive data was tested for attitudinal behavioral and variables.

a- Self-Reported Use of FOT Tools by Foreign Language Learners.

The first question in the user satisfaction survey asked about behavioral variables concerning participants’ FOT tool use. As shown in Table 1, learners were asked how frequently they used FOT tools on finishing writing tasks, 10 of 21 participants stated that they “always (or almost always)” used FOT tools, 4 participants said “usually”, 4 participants stated using these tools “often”, and 3 participants only said that they used the tools “sometimes. No one of the participants mentioned “never”. Accordingly, all participants stated using FOT tools, and the immense majority (84%) stated using them “often” or more frequently. See table (1)

Frequency of FOT Tool Use during 12 Weeks

Response	Frequency	Percent	Frequency Variable
Always	5	23.5%	Always
Almost always	5	23.5%	
Usually	4	19.4%	Sometime
Often	4	19.5%	
Sometime	2	9.5%	
Occasionally	1	4.5%	
Total	21	100%	

B- Direction of Translation for Participants’ Use of FOT Tools.

Students were also asked to report whether they use FOT tools to translate from their Arabic language to English, from English to Arabic, or both. Outcomes showed that these tools were used for translation both from learners’ Arabic to English and vice versa. As shown in Table 7, the majority of students (90%) reported using the tools to translate both from their Arabic language into English and from English to Arabic language. The remaining 2 students (10%) stated using the translation tools only for translating from their Arabic to English, and no one reported using the tools only to translate from English to their Arabic.

The answers to this question were inconsistent with what was observed in the video recordings. See table (2)

Table 2 Language Direction Used of FOT Tool

Frequency	Frequency	Percent
Arabic into English	19	90 %
English into Arabic		
Arabic into English	2	10%
Total	21	100%

c- Objectives for Students’ Use of FOT Tools.

Another question investigated about a variety of different purposes for which the students might use FOT tools. For each possible purpose (six total), students were asked to show whether or not they used FOT tools for that purpose in the previous 12 weeks. The three most frequently recognized purposes for using translation tools contained within: “Double-checking of the meaning accuracy of the words or the expressions by detecting their meaning in Arabic” (all students); “Translating words from your Arabic into English” (79% of students); “Translating phrases or expressions from Arabic into English” (52.6%). English” (26%). The least common purpose for which students reported using FOT tools was “Translating bigger sections than sentences (paragraphs, for example) from Arabic into English” (26%). The questionnaire also asked the students a good question if they had to edit any part of the translation made by the tools. That is when they used the FOL tool to translate a word, phrase, or sentence from Arabic into English to be accurate and appropriate for English writing? Most of the students stated having to post-edit at least some of the translations made by the FOT tools. 17 out of 21 (81%) mentioned having to post-edit some of what the tools translated into English, and 4 students (19%) mentioned having to post-edit everything that he translated into English (see Table 3).

Table 3 Objectives for FOT Tool Use

Purpose	Response	Frequency	Percent
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Double-checking the of accuracy of the words or the expressions by seeing their Arabic meaning.	Yes	21	100%
Translating the words from Arabic into English.	No	5	24%
	Yes	16	76%
Translating the phrases or the expressions from Arabic into English.	No	10	48%
	Yes	11	52%
Translating the collocations from your Arabic into English.	No	13	62%
	Yes	8	38%
Translating the sentences from Arabic into English.	No	13	62%
	Yes	8	38%
Translating bigger parts than sentences (paragraphs for example) from Arabic into English.	No	16	76%
	Yes	5	24%
I had to post-edit anything I translated into English.	Yes	4	20%
I had to post-edit part of what I translated into English.	Yes	17	81%
I frequently used the tool Google Translate to help me in writing assignments.	Yes	19	91%
	No	2	9%

Students were asked to state which translation tools they used to help them in their English writing as part of the questionnaire survey. Students could list multiple tools. Nineteen out of twenty-one participants (91%) stated that they frequently used the tool Google Translate for writing tasks. (9 %) mentioned other tools.

D- Overall Usability and Satisfaction.

According to their questionnaire responses, 12 out of 21 Students (57%) found FOT tools extremely useful when writing essays in English. Nine Students (43%) found the tools fairly or not very useful (see Table 4). Thus, overall, the majority of participants stated finding FOT tools useful to at least some degree when writing in English.

Table 4

Overall Usability of Free Online FOT Tools in L2 Writing

Purpose	Response	Frequency	Percent
Extremely useful	Yes	12	57%
Fairly/not very useful	Yes	9	43%

According to the benefits and disadvantages of free online FOT tools for FL writing in several open-ended questions, participants were asked to describe the benefits and disadvantages. As shown in Table 5, the most frequently cited benefit, reported by 11 out of 21 participants (52%) is that they help them understand the meaning of a word, paragraph, or text. The next most commonly cited benefit is that the tools are believed to help enrich students' English. Participants listed several other functions that the tools helped them to perform. Also, the tools were fast, free, and convenient.

Table 5

Benefits of Free Online FOT Tools for L2 Writing

Benefit	Frequency
The tools help me to...	
1- Understand the basic meaning of the word, the paragraph, or the text	52 %
2- Enrich English vocabulary	54%
3- Write an unknown sentence or phrase	61%
4- Check the spellings	53%
The tools are...	
1- Fast	65%
2- Free	51%
3- Convenient	57%

According to the open-ended questions students also mentioned disadvantages of using FOT tools: most commonly that FOT tools are not always accurate mentioned by 17% students, and translations may be wrong

context (16% of participants). Students also stated that using FOT tools can make learners dependent on the tools (26%) and feel hesitant when speaking English (11%). Finally, students stated that using the tools requires an Internet connection (5%). For more details on the disadvantages of FOT tools noted by the students, see Table 6.

Table 6

Disadvantages of Free Online FOT Tools for FL Writing

Disadvantages	Frequency
The tools help me to...	
1- Sometimes FOT tools are not accurate	17 %
2- Wrong meaning in the context	16 %
3- Make students rely on FOT tools	26%
4- Feel hesitant while speaking in English	11%
5- Require Internet connection all the time	5 %

3- Interview Analysis (Qualitative).

The seven students who enthusiastically used FOT tools in their writing course were interviewed. Students mentioned three major tools that they used. These included Google Translate, Google (search), and an Oxford dictionary. Some students stated using other dictionaries and tools. Students used Google Translate to translate the words or the phrases from their Arabic language into English to guarantee that the words or the phrases are used correctly, and the dictionary sites to understand the meaning of English words. With respect to the reasons for which they used FOT tools, students justified using these tools primarily for translating the words and the phrases. Students sometimes used FOT tools for translating sentences, but they stated that the tools were less useful for longer sections of the text, except for getting a very basic understanding of a long English passage in their Arabic language. Students most frequently used FOT tools to translate from their Arabic language into English, but they also reported translating from English into their own language. Most participants reported frequently needing to edit the results of the translated text. The following is one of the students' words:

"The tools which I always use is Google (a way to make sure that I am writing the correct word), Google translator (if I am not sure how to translate something that I am thinking in Arabic to English). Another thing I use is online dictionaries for example "dictionary.com" or "Oxford dictionary" (if I want to make sure of the meaning or a definition of a word in English, or if I need to use a synonym or antonym for a word in correct writing. Sometimes when I am not able to say something in English like I would say in Arabic, then I give it to Google translate to translate into English. The result is not always good, but to be honest, sometimes it is really satisfied. It surprises me. I often edit the text; I do not leave it as it is. I use Google Translate when translating a lot of words, or even individual words."

When students were asked about the benefits and disadvantages of FOT tools, they listed five primary advantages and only one common disadvantage. Participants mentioned finding the tools more helpful and appreciating that they were free, user-friendly, quick, and freely available. On the other hand, they realized that FOT tools are not always correct in their translations and cannot be reliable without further editing from their side. The followings are their words:

"I think they are beneficial especially for higher levels learners because students can understand if it is correct or not. I think they are very useful in translating words and short phrases and sometimes long sentences from one language to another. But I believe one needs to be cautious when using it, otherwise, you can have a word or a sentence with a fully different meaning, particularly with long sentences, because learners often don't do it properly."

An answer to a question about the use of FOT tools they said the following" *They are convenient more for higher level learners because they have the ability to re-edit what they use if it is correct or not. Because Internet is available, we can use FOL tools everywhere. We don't have to pay or make an account to use them. Words and expressions that we don't remember... we can translate them simply in English. They are now part of our English writing. They are very beneficial. We can use them in our class and on our computer or mobiles. They are not heavy like books or dictionaries, as we need not to carry them everywhere. Also, they are easy to practice... I mean we do not have to download them on our mobiles or computer... Google translate has nearly all the words and is able to translate sentences too".*

An answer to a question about the benefits of FOT tools in language learning they said the following” *We think they help students a lot, and since they are used more often, but companies must invest more money and time to develop them. That would be great since Google is known everywhere of the world. We guess that would increase a lot of students’ learning. We think teachers must advise and direct their students that sometimes **FOT tools** are not always very accurate. We don’t know if teachers can help students correct the errors of Google Translate. Thus, they will be very helpful.”*

Discussion

The results of the present study showed that EFL students have a positive attitude toward FOT tools and are satisfied with using these tools in FL writing. However, many students stated FOT tool output needs post-editing and that not all translations are correct. In addition, through careful observations and analysis of the video data showed that only about one- third of students significantly used FOT tools in completing their writing tasks. While through the observation part of the study was centered on a small sample (7 students), it made interesting results that showed that the students used these tools more efficiently than effectively. EFL instructors need to seriously consider introducing and using FOT tools in their FL writing courses and developing tasks and exercises that help FL learners to employ these tools to improve their writing skills under the help and the supervision of the teachers. Also, concerning the opinions which tend to either reject or ignore the role of translation in teaching and learning the language what is really happening in FL class rooms, where FOT tools clearly play a noticeable role. The present study proved it is wrong. These tools are more autonomous in applying AI; available modern technologies such as FOT tools. For this reason, FL instructors and curriculum developers are stimulated to consider FOT tools as a useful tool to their classrooms rather than a hindrance to teaching and learning. For the questionnaires and interviews, students stated using FOT tools most regularly for translating short sections of text, such as the words and the phrases, and less frequently for translating the longer sections such as the sentences or the whole paragraphs. They also often used these tools for double-checking the definition and meaning of English words in their Arabic language. This is consistent with the study of Niño’s (2018), who stated that post-editing involves adjusting and modifying a text that is machine-translated.

Motivation affects students’ language learning. In addition, learners’ satisfaction with technological tools used in learning settings has been repeatedly shown to be connected with their motivation, engagement and learning. For example, in one of the researches, learners’ satisfaction with certain e-learning atmospheres was associated with their self-regulation in finishing learning assignments in such environments (Liaw & Huang, 2013). Thus, the idea that learners, as a whole, are extremely satisfied with the use of FOT tools is further support for the conclusion that learners are likely to carry on using such tools whether or not their FL teachers agree on such use. Even if learners follow preventions against the use of FOT tools for coursework, they are likely to use them for other missions in their everyday English communication. Learning suitable use of such tools is thus again maintained as a worthwhile objective to incorporate into FL classes.

In addition, the current study indicates the efficiency of FOT tools in a group of learners at a high language learning level. Similar to Garcia and Pena’s (2011) work showing that the use of MT tools helps beginning second language learners to develop their communication in the L2, the current study showed similar benefits for high EFL learners. Nearly all of these more advanced EFL students stated that they found such tools supportive and that the tools enhanced their FL writing. These views were confirmed by the efficiency analysis of the observed writing assignments. These results are consistent with O’Neill’s (2018) work, which reported that the right use of FOT tools did not decrease but frequently developed the quality of students’ FL writing.

Conclusion

Through the results of the present study, it is obvious that FOT as an AI tech tool is considered a partial basis for the autonomous learner, however. Human instructors are still crucial for mastering a foreign language. The work by (Crowther, et al, 2017) shows that “the benefit of Duo lingo is more likely as a learning aid app than as the sole tool for autonomous learning.” AI-based vocabulary improvement systems such as TextGenome.org are enhancing language-learning chances in which learners can decide their path and pace. Learners will be able to handle their learning. Focusing on reinforcement learning has pushed AI systems beyond pattern with respect to decision making.

Over the upcoming decades, research will be driven by how to incorporate AI tools for example machine translation and virtual reality applications by integrating AI with face-to-face situations for ideal learning. While there are a number of challenges in incorporating AI to language teaching and learning within and beyond traditional curricula, the chances for learning and teaching to provide modified and open access to all learners are huge.

The vast availability of plentiful technological tools alone does not guarantee the improvement of learners' autonomy. But the openness and free and low-cost access to today's technological platforms (for example online free translation tools) have made unparalleled chances for foreign language learning. The independent learner's challenge is to understand how to connect such tools to meet his or her learning purposes. In traditional education situations, by contrast, the teacher's educational content and task-based activities decide the significant connections between the metacognitive, cognitive, and socio-affective chances of learning. The current use of language learning applications with personalized and connected settings has significantly redefined the instructor's role as an authority. The teaching style has now converted to a distributed expertise in which learners can digitally connect with native speakers outside the geographical borders to strengthen their learning. The current AI system capabilities indicate that the ability of personalized learning is closer to realization, due to the ability to expect and adjust based on huge learner data (Reiland, 2017). Approaches for overcoming challenges and capitalizing on chances will rely heavily on future research in the coming decades.

The results of this study ratify that EFL learners have a clear positive attitude toward FOT, especially toward Google Translate. However, a gap was shown between learners' consciousness of the tools and their actual use of these tools. Moving forward within the EFL and broader FL learning settings, now that we know learners are using FOT tools frequently and are generally happy with them, it seems that it is time to incorporate FOT tools in the FL classrooms. It is important for teachers in the fields of teaching English as a foreign language (TEFL), second language acquisition (SLA), and translation to take knowledgeable decisions about the right use of such tools in our classrooms. It is clear that teachers of FL courses should cautiously consider incorporating such tools in their classes, in the knowledge that most learners are already using such tools on their own. Therefore, FL instructors could be urged to incorporate language activities and tasks around these tools to confirm that learners are using these tools effectively and efficiently. In specific, explicitly training learners how to post-edit machine-translated texts would be a useful educational activity. With help from language teachers, students can be taught to check grammatical and lexical errors that already exist in texts translated by FOT tools. Such activities are useful for FL writing and enlarge students' knowledge of grammar, vocabulary and overall writing fluency. Lastly, the quality and availability of FOT tools has been improving and will continue to develop. As shown by this study, learners are already using these tools whether clearly taught to use them or not. Therefore, FL teachers need to make sure that strategies are applied that enhance fair and effective use of such tools in their classrooms.

Recommendations and suggestions for further research

- 1- Further research is needed in this area could further clarify the ways in which FOT tools might serve as important educational tools in ESL and other FL classrooms.
- 2- This study can replicated with a larger sample, wider variety of EFL levels represented, and more background information on participants to understand the factors leading students to use FOT tools extensively and others to use them minimally such as; Student gender and age, etc.
- 3- In particular, learners' proficiency level in the FL may strongly influence their FOT tool use. Learners who are more proficient in the FL may need to use these tools less often than those who are less proficient. In future studies, more research is needed to investigate if FL proficiency could be assessed prior to observing and asking about FOT tool use to assess this possibility.
- 4- Another experimental study is needed to assess the influence of FOT tools as a component of the FL syllabus. For example, an experimental group could receive training in the effective and efficient use of FOT tools as well as the overall quality of their FL writing, could then be compared with that of a control group that had received no such training.

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A- Consent Form

Appendix B

Assignment#1: Cause/Effect Essay Write a paragraph on ONE of the following topics.

- 1- In some countries, it can be very difficult for young men to find good jobs despite their experience. Is this true? Why or why not?
- 2- More and more qualified young men are moving from developed countries to rich countries to find areas like engineering, computing and medicine. What are the reasons?

Important instructions:

1. You are allowed to use any form of online resources (online dictionaries; online translation tools; etc.) for completing this writing task.
2. The thesis statement should clearly show whether you are tackling cause or effect, and it should present the main points in order.

YOUR ESSAY WILL BE EVALUATED ACCORDING TO THESE CRITERIA:

- A. Organization and development (4 points)
 - The introduction has a clear thesis or purpose.
 - The body paragraph develops a cause logically.

- The cause should be supported with specific details.
- There are clear, logical linking devices within and between sentences.
- B. Language Accuracy (8 points)
 - Grammar and sentence structure: o Verb tenses; s –v agreement; articles; singular and plural nouns; non-count nouns; pronoun use; word order; punctuation.
 - Vocabulary o Correct word choice and word form
- C. Range (variety) of grammar structures and vocabulary (6 points)
 - Complex sentences and grammar structures as well as simple ones.
 - A range of vocabulary: academic; idiomatic; causal transition expressions
- D. Overall Communication (2 points)
 - Your piece (intro + body paragraph 1) is fluent and effective (it “reads like English”)
 - Your message is clearly communicated. The reader does not need to stop often to re-read in order to understand.

Appendix C Editing Assignment/2

This assignment contains many grammar mistakes, vocabulary inaccuracies/errors, and overall communication errors. As we practiced in class during the previous two weeks, edit the essay for grammatical, lexical and stylistic errors.

Important instructions: You may use any form of online resources (online dictionaries; online translation tools; etc.) for completing this writing task.

Review the following criteria carefully before editing the essay. A. Organization and development The introduction has a clear thesis or purpose Each body paragraph develops a cause/effect logically Each cause/effect is supported with specific details There are clear, logical linking devices within and between sentences, as well as between paragraphs.

B. Language Accuracy Grammar and sentence structure: Verb tenses; s –v agreement; articles; singular and plural nouns; non-count nouns; pronoun use; word order; punctuation, etc. Vocabulary Correct word choice and word form

C. Range (variety) of grammar structures and vocabulary Complex sentences and grammar structures as well as simple ones A range of vocabulary: academic; idiomatic; causal transition expressions

D. Overall Communication

The essay is fluent and effective (it “reads like English”). The message is clearly communicated. The reader does not need to stop often to reread in order to understand.

Topic: People are becoming increasingly dependent on technology. It is used in business, hospitals, crime detection. What things will they be used in future? In this dependence on technology a good thing or should we be more suspicious of its benefits? Technology has invaded our modern life style. Using technology becomes essential for us. It is used in several fields like hospital, crime investigation and in Airports. This using will be increased by the time and affect our future positively. One of the most important advantages of using technology is long distance education. This kind of education provides great chance for developing countries students. They can enroll in big universities all over the world from their own place. In this way, they can save more money they could spend on traveling. Also, they cannot waste time for attending literatures. The materials of most of these courses are available online on the same sites. Another benefit of technology revolution is giving the working mothers a good opportunity to work at home, and take care of their children as well. There are a lot of sites offer these kinds of jobs which can do at home on technology. Such as typing some documents or translate some texts to another language. For people who love private business, they can find a golden chance on the Internet to build their business from home. They can just pay for build their own business website and begin to show their products online. The claiming and paying are both online by credit cards or visa cards or so. Actually, change doesn't always mean going to bad, in this case, technology services our modern life style and make it more convenience. To sum up, computers can serve our life in the future in education field and in work. And we shouldn't worry about that change. Change is the natural of life.

Appendix D

Assignment/ 3- Problem-Solution Essay Read carefully the following topic.

Write an introductory paragraph and two body paragraphs (in the first body paragraph you should address the causes and in the second body paragraph you should give one or two solutions)

Young people have little leisure time and are under a lot of pressure to work hard in their studies. What are the causes and solutions can you suggest?

Important instructions:

You can use any form of online resources (online dictionaries; online translation tools; etc.) for completing this writing task.

Your writing will be evaluated according to these criteria:

A- Organization and development (20 points)

- The introduction has to be a clear thesis
- Body paragraph ONE develops two or three causes of the problem logically.
- Body paragraph TWO suggests one or two solutions to the problem.
- There are clear, logical linking devices within and between sentences, as well as between paragraphs.

B- Language Accuracy (30 points)

- Grammar and sentence structure: (Verb tenses; s –v agreement; articles; singular and plural nouns; non count nouns; pronoun use; word order; punctuation, etc. .
- Vocabulary (Correct word choice and word form

C- Range (variety) of grammar structures and vocabulary (20 points).

- Complex sentences and grammar structures as well as simple ones.
- A range of vocabulary: academic; idiomatic; causal transition expressions

D- Overall Communication (30 points).

- Your essay is fluent and effective (it “reads like English”)
- Your message is clearly communicated. The reader does not need to stop often to re-read in order to understand.

Appendix E

Assignment/ 4- Comparison/Contrast Essay

Write an essay of about 300 words on the following topic.

Compare/contrast your hometown and Riyadh. You may want to consider the weather, transportation, population, job opportunities etc.

As for organization and development, the essay should be well-structured and contain the following:

- a) An introduction (at least one paragraph) which contains a ‘hook’ or introductory comments and a thesis statement that clearly indicates the subjects being compared
- b) The body of the essay: At least 2 supporting paragraphs, each of which propose a point of comparison or contrast well.
- c) A concluding paragraph which summarizes what has been said (re-statement or summing up) and closes effectively. There should also be good use of linking and transition words / expressions both within and between sentences and within paragraphs.

Important instructions:

You may use any form of online resources (online dictionaries; online translation tools; etc.) for completing this writing assignment.

Your writing will be evaluated according to these criteria:

A- Organization and development (20 points)

- The introduction has a clear thesis statement.
- Each body paragraph should have a clear point of comparison/contrast.
- There should be linking devices within sentences, as well as between paragraphs.

B- Language Accuracy (30 points).

- Grammar and sentence structure:
Verb tenses; s –v agreement; articles; singular and plural nouns; non count nouns; pronoun use; word order; punctuation, etc. .
- Vocabulary o Correct word choice and word form

C- Range (variety) of grammar structures and vocabulary (20 points).

- Complex sentences and grammar structures as well as simple ones.
- A range of vocabulary: academic; idiomatic; causal transition expressions.

D- Overall Communication (30 points).

- Your essay is fluent and effective (it “reads like English”)
- Your message is clearly communicated.
- The reader does not need to stop often to re-read in order to understand.

Appendix F

Assignment 5- Benefits /Disadvantages Essay

Write an essay of at least 300 words on the following topic. Many translation experts think that FOT tools is less accurate than human translation and that they can no replace human translators. However, FOT tools are increasingly used by language learners for various purposes. Offer some possible usages of FOT tools. Use explanations and examples, you can use your own personal experience as well to support your opinion.

Important instructions: You can use any form of online resources (online dictionaries; online translation tools; etc.) for completing this writing task.

According to organization and development, the essay should be well-structured and cover the following:

- a) An introduction that has background information on the topic and a thesis statement stating the two sides (benefits and disadvantages of the tools).
- b) The body of the essay: 2 supporting paragraphs at least, one developing the benefits of FOT tools and one developing their disadvantages.
- c) A concluding paragraph that sums up your essay effectively.

Note, there should also be good use of linking words / transition expressions within sentences and between paragraphs.

YOUR ESSAY WILL BE ASSESSED ACCORDING TO THESE CRITERIA:

- A. Organization and development (20 points)
 - The introduction has a clear thesis or purpose Body paragraph ONE develops two or three advantages (OR you may have more than one body paragraph developing advantages. i.e., each body paragraph develops ONE advantage thoroughly.)
 - Body paragraph TWO develops two or three disadvantages (OR you may have more than one body paragraph developing disadvantages. i.e., each body paragraph develops ONE disadvantage thoroughly.)
 - A very short transition paragraph if need be. An effective conclusion
- B. Language Accuracy (30 points)
 - Grammar and sentence structure: Verb tenses; s –v agreement; articles; singular and plural nouns; non-count nouns; pronoun use; word order; punctuation, etc.
 - Vocabulary Correct word choice and word form
- C. Range (variety) of grammar structures and vocabulary (20 points)
 - Complex sentences and grammar structures as well as simple ones.
 - A range of vocabulary: academic; idiomatic; causal transition expressions
- D. Overall Communication (30 points)
 - Your essay is fluent and effective (it “reads like English”)
 - Your message should be clearly communicated. The reader does not need to stop often to re-read in order to understand.

Appendix G

The questionnaire

- 1- How would you rate your usability of FOT tools in your FL writing?
 - a- Extremely useful
 - b- Useful
 - c- Fairly useful
 - d- Not useful
 - e- Not sure
- 2- How frequently do you use FOT tools on completing your writing assignments?
 - a- Always
 - b- Usually
 - c- Often
 - d- Sometimes
 - e- Never
- 3- Which language direction have you used such FOT tools in your writing?
 - a- Only from Arabic into English.
 - b- Only from English into Arabic.
 - c- Both from Arabic into English and from English into Arabic.
- 4- How did you use FOT tools? (You can choose more than one option)
 - a- Double checking the meaning accuracy of words and expressions by seeing their meaning in your Arabic language.
 - b- Translating words, phrases and expressions from Arabic into English.
 - c- Translating words, phrases and expressions from English into Arabic.
 - d- Translating paragraphs from Arabic into English.
 - e- Others.
- 5- Which one the following is true about your FOT tools? (You can choose more than one.)

- a- I had to post edit everything I translated from Arabic into English.
- b- I had to post edit most of what I translated from Arabic into English.
- c- I had to post edit some of what I translated from Arabic into English.
- d- I never post edit anything I translated from Arabic into English.

6- Which of the following FOT tools you often use in your FL writing course?

(You can choose more than one).

- a- Google translate.
- b- World lingo.
- c- Oxford dictionary.
- d- Others.

Thank you for taking the time to do this questionnaire