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The Impact of Computer-Aided Translation Tools Integration in Translation Courses on the Students of the English Department at Bisha University

Afaf Theeb Ali Alaklabi
Saudi Electronic University
Kingdom of Saudi Arabia
Email: afaf4eeb@icloud.com

Author: Afaf Theeb Ali Alaklabi
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Supervisor: Dr. Nada Almazroo
ORCid ID: https://orcid.org/0009-0009-3389-653X
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Kingdom of Saudi Arabia
Ministry of Education
Saudi Electronic University
College of Science and Theoretical Studies
Department of English Language and Translation
Graduate Studies-Master of Translation Technologies

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Afaf Theeb Ali Alaklabi

Department of English Language and Translation, Saudi Electronic University

TRA699: Research Project

Supervised by

Nada Almazroo

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Abstract

This paper presents a study among students enrolled in a Computer Applications in Translation course at the English department at Bisha University. The research aims to investigate the impact of integrating computer-aided translation (CAT) tools in translation courses on the English Department students at Bisha University. The study uses a quantitative approach and a causal comparative design to measure students' attitudes and expectations towards CAT tools integration in translation courses. The research population consists of 30 students of the English Department studying translation, and the research sample is chosen randomly to ensure accurate representation. Data are collected through a Questionnaire and analyzed using descriptive and comparative statistics. However, there are limitations to the current study, including the limited sample size and the focus on the impact on students only. The findings of this study will contribute to the understanding of the effectiveness of CAT tools in translation education and provide insights for english language and translation teachers on how to integrate these tools into their teaching practices.

*Keywords: computer aided translation (*CAT) tools, translation, education, Saudi araiba, technology, english language students

Introduction:

Computer-aided translation (CAT) tools offer major benefits to translation as a profession and as a field of study. Translators today tend to rely on the use of CAT tools due to the great benefits they provide for most translation projects. Many researchers have discussed the integration of CAT tools in either translation courses or in English courses teaching. CAT tools have demonstrated their effectiveness in many ways, especially when it comes to their use on the part of translation students. This quantitative research project aims to investigate the impact of the integration of CAT tools in translation courses teaching on

the students of the English Department, Bisha University. This research is significant because it studies students' attitudes and expectations in an academic area that has, generally speaking, not been extensively investigated.

Literature Review:

Many researchers have studied the integration of CAT tools in the teaching process, whether in English language teaching in general, or in translation teaching specifically, in many countries. The findings of the studies suggest that CAT tools can be of great value when integrated in teaching English and translation.

Tong and Zhang (2019) discussed the application of CAT technology in English teaching in China. In this paper, CAT tools were found to integrate English learning with professional learning in an efficient manner. Such integration aims to provide students with a certain level of English proficiency so that they can quickly translate materials and adapt to market needs. The findings of this study suggest that the addition of CAT tools to the classroom can affect the English translation ability of students to a certain extent. The study findings indicate that the use of CAT software in English teaching can benefit students. The study also proposed a professional English translation teaching model based on the use of CAT tools to improve students' translation efficiency and skills.

Erwen and Wenming (2013) conducted a study on the application of CAT technology in translation teaching. This paper aimed to advocate the application of CAT technology in traditional translation classes in Chinese universities. This study highlighted the importance of incorporating CAT tools in the translation curriculum, and offered recommendations for designing CAT teaching modules. It argued that traditional translation and teaching methods are no longer sufficient to meet the demands of the modern translation industry, which requires translators to be proficient in the use of CAT

tools. The study provided a detailed explanation of the different types of CAT software and how they can be used in translation teaching. The authors also emphasized the importance of cultivating teachers' practical ability when it comes to operating CAT tools, and utilizing internet resources to enrich translation teaching.

Yao (2017) also discussed the application of CAT tools in translation teaching in China. He focused on the current situation regarding the adoption of CAT tools in translation teaching in China. A survey was used to investigate teachers' understanding of the technology, and to identify existing problems in terms of its adoption in teaching translation. According to Yao, the lack of technologically qualified teachers is the biggest barrier to the use of CAT tools in translation teaching. Chinese colleges have not used CAT tools in teaching due to the short time available for students in the classroom, and the fact that it is not a crucial condition for employment. Lastly, two respondents who offered more information, stated that schools are not applying for the use of CAT software in teaching because CAT tools are not in line with their stated educational goals.

He & Díaz-Cintas (2014) conducted a similar study on the application of CAT tools in teaching scientific and technological translation from English to Chinese. The research investigated the function and potentiality of translation technology, including CAT tools, electronic corpora, and internet search engines, in the teaching of scientific and technological translation. The findings of the study showed that training in the use of CAT tools will improve the quality of scientific translation. It also showed that the students who used CAT tools scored significantly higher than the students who did not. Another finding was that spending more time than necessary on a translation task may not guarantee a better result, and that students who have spent a long stay in an English-speaking country do not necessarily perform better when it comes to the translation of

scientific and technological texts. Lastly, once students have learned how to use CAT tools, they will use them to translate scientific and technological texts effectively.

These studies show the impact of integrating CAT tools in the teaching process, whether in English courses generally, in translation courses, or in specialized translation courses. Further studies have been conducted in the Middle East region which the current study can benefit from.

Alotaibi (2014) investigated the attitudes of 103 female translation students at King Saud University in Riyadh towards the use of CAT tools. The study aimed to assess the students' degree of knowledge of CAT tools, and their expectations and attitudes when it came to using these tools. The results of the study showed a relationship between the increase in the knowledge of CAT tools by the end of the course, and the change in the students' attitudes towards the discipline.

In Mahfouz's research (2018), the attitudes toward CAT tools application on the part of translation students and professionals in Egypt were considered. The researcher's goal was to investigate users' attitudes and expectations toward CAT tools, with specific reference to the perceived benefits of such tools as reflected in their ease of use and compatibly. Mahfouz pointed to an overall favorable attitude on the part of the participants when it comes to using CAT tools. The findings also confirm that users with better computer skills have more favorable attitudes towards CAT tools than do those with more experience of translation.

The subjects of the current research, English department students, Bisha University, are generally unfamiliar with the use and application of CAT tools, in that such aspects are largely untaught to the English Department students in Bisha University. In

translation practices, these students use printed dictionaries. This is considered as a drawback that needs to be addressed, given the importance of technology nowadays.

Method:

3.1. Study design:

This study aims to measure the impact of utilizing CAT tools in teaching translation within the English Department in Bisha University. The research makes use of a quantitative approach to measure the students' attitudes and expectations toward CAT tools. A causal comparative design is used to identify the extent to which CAT tools affect English Department students.

3.2. The research population:

The population is made up of 30 students of the English Department who are studying translation. This research studies the impact of CAT tools integration on students in the English Department in Bisha University. It consisted mostly of English Department students, especially those from levels three to eight to whom CAT tools remain a foreign concept.

3.3. The research sample:

Probability sampling is used to ensure that the sample is representative of the student population within the English Department and that it is unbiased. 30 students from each level are chosen randomly. Each group will contain five to ten students with different levels of English language acquisition to make sure that, the results drawn from the selected sample are representative of all students in the English Department.

3.4. The research instrument:

A questionnaire is employed in order to extract the necessary data. Participants are asked to fill out an online questionnaire. Students' responses to the questionnaire give a general view of the students' expectations and attitudes toward CAT tools integration in translation courses. The questionnaire comprises five sections. The first section is devoted to demographic data, such as students' academic level, gender, and age. The second section concentrates on to the perception of CAT tools on the part of the students. The third section focuses on familiarity with CAT tools. The fourth is about training on CAT tools, while the last section deals with users' preference.

In addition to the demographic questions, the researcher made use of 15 statements targeting four main constructs. The respondents are asked to choose one of five possible responses on a 5-point Likert scale, the most commonly-used scale for attitudinal research. Responses range from Strongly Agree to Strongly Disagree, in which Strongly Disagree corresponds to 1 point, while Strongly Agree corresponds to 5 points. A middle point Neutral was included for users who may feel uncertain about any of the statements. The questionnaire was carried out using Google Forms, an online software for creating, disseminating, and processing questionnaires, in order to make it accessible to all participants.

3.5. Data analysis method:

This research relies heavily on SPSS software in analyzing the data and producing descriptive statistics to reach the intended results. This software offers a clear and mostly error-free analysis.

Results and Discussion:

4.1 Research Question 1: Does CAT tools integration in translation teaching affect the quality of the translations produced by the students?

The respondents were asked to state their agreement level in terms of five statements

about their opinion of CAT tools as shown in Table 4.1. Most of the respondents indicated that they strongly agreed that the integration of CAT tools in translation teaching improves the quality of the translations they produce. The overall mean value was recorded (M = 4.32 and SD = 0.453). On the other hand, the statement "Using CAT tools makes translation easier" displayed the highest mean (M = 4.70, SD = 0.466). However, the minimum mean score was found for the statement "The advantages of CAT tools are far more than the disadvantages" (M = 4.03, SD = 0.88). Therefore, the findings show that most of the respondents strongly agree with the effect of CAT tools integration in translation teaching in terms of the quality of the translations they produce.

Table 4.1

Effect of CAT tools integration in translation teaching on the quality of the translations produced by the students (n=30)

	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean (Standard Deviation)
1. Using CAT tools makes translation easier.	0	0	0	30.0	70.0	4.70 (.466)
2. Using CAT tools improves the translation quality.	0	3.3	0	50.0	46.7	4.40 (.674)
3. CAT tools increase my productivity and speed up the translation process.	0	0	6.7	43.3	50.0	4.43 (.626)
4. The advantages of CAT tools are far more than the disadvantages.	0	3.3	26.7	33.3	36.7	4.03 (.889)
5. The benefits of CAT tools are apparent to me.	0	3.3	23.3	36.7	36.7	4.06 (.868)
Total mean						**4.32 (0.453)**

4.2 Research Question 2: What are the students' expectations and attitudes towards CAT tools integration in translation teaching?

Table 4.2 presents the results of the students' expectations and attitudes toward CAT tools integration in translation teaching. Based on the overall mean value (M = 4.05, SD =

0.722), the statement with the highest mean was "It is easy for me to perform tasks using CAT tools" (M = 4.23, SD = 0.971). Meanwhile, the lowest mean was recorded in terms of the statement "CAT tools are user-friendly and not complicated", with a mean of 3.83 and a SD of .949. The findings in Table 4.2 suggest that most students have positive attitudes towards CAT tools integration in translation teaching. For example, the statement "CAT tools can increase my productivity" and "Using CAT tools in the class is useful" received high mean values, and a high percentage of agreement and strong agreement. This suggests that students perceive CAT tools as being helpful when it comes to learning and translation tasks.

Table 4.2

Students' expectations and attitudes toward CAT tools integration in translation teaching (n=30)

	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean (Standard Deviation)
1. It is easy for me to perform tasks using CAT tools.	3.3	3.3	6.7	40.0	46.7	4.23 (.971)
2. CAT tools are user-friendly and not complicated.	0	10.0	23.3	40.0	26.7	3.83 (.949)
3. I feel confident while using CAT tools.	0	6.7	13.3	43.3	36.7	4.10 (.884)
Total mean						**4.05 (0.722)**

4.3 Research Question 3: What are the reasons for the students' positive or negative attitudes toward CAT tools integration in translation teaching?

The results in Table 4.3 provide insights into the reasons behind the students' attitudes toward CAT tools integration in translation teaching. As shown in this table, the findings demonstrated the respondents' perspectives on the reasons for their positive or negative attitudes toward CAT tools integration in translation teaching. The overall mean value was recorded (M = 3.70, SD = 0.924). Specifically, the highest

mean score of 4.06 and SD 0.868 was recorded for the statement "Using CAT tools suits my learning style" indicating that some students may have positive attitudes towards CAT tools integration because it fits their learning style. Meanwhile, the statement with the lowest mean score was "CAT tools do not require much training", with mean scores of 3.33 and SD of 1.26, indicating that some students may disagree with this statement and may have concerns about the need for CAT tools training.

Table 4.3

Reasons for the students' positive or negative attitudes toward CAT tools integration in translation teaching (n=30)

	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean (Standard Deviation)
1. CAT tools do not require much training.	0	40.0	13.3	20.0	26.7	3.33 (1.26)
2. Using CAT tools suits my learning style.	0	6.7	13.3	46.7	33.3	4.06 (.868)
Total mean						**3.70 (0.924)**

4.4 Research Question 4: To what extent does CAT tools integration in translation teaching affect the English Department students?

Table 4.4 presents the findings of the extent to which CAT tools integration in translation teaching affects the English Department students. The overall grand mean value was recorded (M = 4.09, SD = 0.552). Specifically, the statement "CAT tools and the instructions were introduced clearly to the respondents" recorded a high mean score of 4.33 and an SD of 0.660. On the other hand, the statement "CAT tools do not hinder my creativity as a translator" was recorded with the lowest mean score of 3.70, as shown in Table 4.4, with approximately 91.8% of the respondents either Agreeing or

Strongly Agreeing with the statement.

Table 4.4

Degree of the effect of integrating CAT tools in translation teaching on the English Department students (n=30)

	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean (Standard Deviation)
1. CAT tools offer me the features I need to simplify the translation process.	0	3.5	3.9	50.0	42.6	4.33 (.606)
2. CAT tools do not hinder my creativity as a translator.	0	2.8	5.3	53.9	37.9	3.70 (1.08)
3. CAT tools are suitable for translating from English to Arabic and vice-versa.	0	1.8	3.2	52.8	42.2	3.76 (1.19)
4. Using CAT tools in the class is useful.	0	2.5	4.3	56.4	36.9	4.33 (.606)
5. CAT tools and the instructions were introduced clearly to the respondents.	0	3.2	7.1	55.7	34.0	4.33 (.660)
Total mean						**4.09 (0.552)**

4.5 Discussion:

The results of the study provide valuable insights into the attitudes and expectations of the English Department students at Bisha University toward the integration of CAT tools in translation teaching. Based on the results of the study, it can be seen that the benefits of employing CAT tools are generally agreed upon by most of the participants.

Although most participants believe that CAT tools can have positive impact on students' learning outcomes by improving productivity and speed, and enhancing

translation quality, some of the respondents still do not think that the advantages of CAT tools outweigh the disadvantages. Most of the students with relatively low academic levels revealed a lack of knowledge of many aspects of CAT tools, as indicated by their Neutral and Disagree responses to the statement "The benefits of CAT tools are apparent to me". However, their numerous Strongly Agree and Agree responses to the other statements indicate that they are receptive to the integration of CAT tools in translation courses. On the other hand, many of the students with relatively high academic levels showed a high level of agreements in this regard, which indicates more favorable attitudes to CAT tools in many respects which can be attributed to their greater familiarity with CAT tools.

Most respondents find CAT tools easy to use and useful for their learning, especially those on a more advanced academic level. But there were some concerns about the potential impact of CAT tools on creativity and the need for training. Therefore, the current study results assume that, providing clear instructions and training on the use of CAT tools is crucial to ensure that students can use them effectively and efficiently. The findings indicate an overall positive attitude towards the compatibility of CAT tools with the participants' needs. Most of the respondents, despite their different academic levels, believe that CAT tools offer them the features they need to simplify the translation process. Moreover, they particularly think that CAT tools are suitable for translating from English to Arabic and vice-versa.

Several negative attitudes also point to the tools hindering the respondents' creativity. Considering that most of the Neutral and Disagree responses were given by students who are more advanced academically, this can be attributed to a lack of the training they need to achieve higher levels of efficiency. Many respondents responded with Neutral and

Disagree to the statement “CAT tools do not require much training”. This can be a possible explanation of their negative attitude.

The survey has served to provide further insights into student expectations. The results indicate that respondents who feel confident while using CAT tools consider them to be user-friendly and not complicated. They also believe that it is easy for them to perform tasks using CAT tools. It becomes apparent that the findings of the current study are similar to those of Mahfouz (2018) and Alotaibi (2014) that student expectations and attitudes correlate with their familiarity with CAT tools. They also agree that proper training can help address concerns about the negative impact of CAT tools on creativity.

Explaining the concept of CAT tools and their use was time consuming, as this concept had been relatively neglected and untaught to the English Department students in Bisha University. Therefore, there were some concerns that students would not be willing to answer some qualitative questions about their experience. Therefore, the questionnaire focused on quantitative questions to ensure a better response although it affected the variety of results achieved by this research. Due to the time constraints, the impact of CAT tools integration on the instructors and the institution was not investigated. Additionally, the sample was limited to English Department students at Bisha University, which may affect the generalizability of the results.

Conclusion:

The current study investigates the impact of CAT tools integration in translation courses on the students of the English Department, Bisha University, with specific reference to students’ attitudes and expectations. This investigation was attempted because the subject of the current research, students of the English Department at Bisha university, are generally unfamiliar with the use and applications of CAT tools. Thus, the study shows that it is highly recommended that CAT tools be introduced and integrated

into translation courses as it improves students' skills and maximizes their productivity. The study highlights the need to provide clear instructions and proper training on the use of CAT tools in order to achieve high levels of efficiency in the translation process. There were some concerns on the part of the students about the potential impact of CAT tools on creativity and the need for training.

In terms of the current translation teaching methods, incorporating CAT tools into translation courses could effectively improve the students' productivity and speed of translation, and enhance translation quality. Further studies are needed in the following areas:

- Applying the same instrument to samples of translation students in other areas.
- Conducting more qualitative research to gain further understanding of this issue.
- Investigating the impact of integrating CAT tools in translation teaching on teachers and the institution.

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Appendix

Research instrument:

A Study of Students' Attitudes and Expectations Toward CAT Tools Integration in Translation Courses.

Dear respondent,

My name is Afaf Alaklubi, and I am currently studying for a master's in Translation Technologies at the Saudi Electronic University, College of Science and Theoretical Studies.

I am conducting a survey as an essential part of research project requirements to investigate the impact of computer-assisted translation (CAT) application on the students of the English department in Bisha university. The questionnaire aims at investigating the English department students' attitudes and expectations toward integrating CAT tools in translation courses in Bisha University. Your consent on participating entails answering questions about your attitudes and expectations toward CAT tools.

Your consent on participating entails answering questions about your perspectives and attitude toward CAT tools. I can assure you that all the information generated will be kept in strict condence to be used for academic purposes only. There is no cost for participation in this study. Participation is completely voluntary. Thank you for taking the time to ll in this questionnaire; it should only take 5 minutes.

This questionnaire met the standing criteria of the Saudi Electronic University Ethics Committee.

*__Computer-assisted translation__, abbreviated as **CAT tools,** is translation software which can help translators translate faster and improve translation quality.

Watch this Quick Video to understand the "CAT tools" concept http://youtube.com/watch?v=A0Uwq89b91A

1. Do you agree to participate?

- Yes I agree
- No I do not agree

Demographical questions

2. Student's Academic level *

- Freshman (a student in level 3 and 4)
- Junior (a student in level 5 and 6)
- Senior (a student in level 7 and 8)

3. Gender *

- Male
- Female

4. Age*

- 20-22
- 22-24

Students' opinion of CAT tools

	Strongly agree	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
Using CAT tools makes translation easier*					
Using CAT tools improves the translation quality*					
CAT tools increase my productivity and speed up the translation process *					
The advantages of CAT tools are far more than the disadvantages *					
The benefits of CAT tools are apparent to me *					

Familiarity with CAT tools

	Strongly agree	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
It is easy for me to perform tasks using CAT tools *					
CAT tools are user-friendly and not complicated *					

I feel confident while using CAT tools *	

Training on CAT tools

	Strongly agree	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
CAT tools do not require much training *					
Using CAT tools suits my learning style*					

Users' preferences

	Strongly agree	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
CAT tools offer me the features I need to simplify the translation process *					
CAT tools do not hinder my creativity as a translator *					
CAT tools are suitable for translating from English to Arabic and vice-versa *					
Using CAT tools in the class is useful*					
CAT tools and the instructions were introduced clearly to the respondents*					