Exploring Jadara University Students' Attitudes toward the Use of Computer-Assisted Translation (CAT) Tools in Language Instruction

Luqman M Rababah¹, & Duaa K Talafha¹

¹ Department of English Language and Translation, Jadara University, Irbid, Jordan

Correspondence: Duaa K Talafha, Department of English Language and Translation, Jadara University, Irbid, Jordan. E-mail: Doaa88talafha@gmail.com

Received: December 12, 2024	Accepted: February 5, 2025	Online Published: March 10, 2025
doi:10.5430/wjel.v15n5p12	URL: https://doi.org/10.5430/wj	jel.v15n5p12

Abstract

The study investigates 200 Jadara University translation students' thoughts on CAT curriculum integration to the curricula. It primarily concerns English translation students and how CAT tools impact their learning and professional development of their mastery of English skills. To utilize technology effectively, instructors must understand students' pre-adoption ideas and expectations. Quantitative surveys and qualitative interviews analyze students' CAT tool expectations, concerns, and acceptance. The findings indicate enthusiasm for efficiency increases and concern about complexity and traditional translation abilities. The study shows that CAT tool integration requires technical training and detailed education to address student concerns. This study aids Jadara University and other translation instructors in CAT tool integration. When implementing essential features, such as translation memory (TM), terminology management, and alignment tools, students will be abler to understand and practice real-world translation workflows.

Keywords: cat tools, diffusion of innovations theory, TAM tech acceptance model, social constructionism, diffusion of innovations theory

1. Introduction

The incorporation of Computer-Assisted Translation (CAT) technologies in translation studies curricula changes student training for the current translation profession. These technologies at Jadara University have heightened translation students' expectations and concerns. Translator memory, terminology management, and automated quality checks can increase translation efficiency, accuracy, and consistency (Bowker & Fisher, 2010), however student preparation and attitudes must be considered when using CAT technologies in education. Due to their industrial relevance, many students choose CAT tools, which provide them a competitive edge and practical skills they can employ in the job (Mellinger & Hanson, 2017). These technologies should eliminate repetitive effort and increase efficiency, letting students improve their translations. Students worry about CAT technology' complexity and disadvantages despite their benefits.

Many students fear that CAT tools are hard to master, especially for beginners. Due toof their thier apparent complexity, translators may worry about using the tools without compromising their language and cultural competency (Pym, 2013). Translation studies emphasize critical thinking and problem-solving, but some students worry that overusing technology might overshadow it. Some students appreciate conventional translation methods for their role in deepening source and destination language learning. CAT systems may devalue them. These considerations emphasize the necessity to address both CAT tool integration technicalities and pedagogical strategies that will assist students change. Students need detailed teaching and guidance to use these devices. They emphasize incremental learning, hands-on instruction, and feedback to grasp new technologies. Without help, students may get distracted or frustrated, undermining CAT tool integration's instructional aims.

Curriculum design and instructional assistance must meet student concerns and expectations to adopt CAT tools at Jadara University. Educators can enhance CAT tool acceptability and efficacy by addressing students' attitudes before using them. Creating a successful learning environment where CAT technologies are more than technical tools and instructional aids requires preemptive understanding. Thus, this study examines Jadara University translation students' opinions and offers practical solutions for CAT integration into the curriculum. The findings will modify the university's translation curriculum to match students' evolving needs and prepare them for the translation business.

2. Statement of the Problem

Computer-Assisted Translation (CAT) approaches are essential as technology enhances translation efficiency, accuracy, and productivity. SDL Trados, MemoQ, and OmegaT speed up translation using translation memory, terminology management, and automated quality assurance (Bowker & Fisher, 2010). CAT tools are becoming ubiquitous in professional translation; therefore, academic translation schools use them to prepare students for jobs. However, students' attitudes, opinions, and readiness to apply these tools greatly affect integration success. To ensure a smooth, successful, and educationally appropriate transfer, Jadara University must examine student attitudes before integrating CAT technologies to the translation curriculum.

CAT tools are hard to implement into academic settings despite their benefits. Previous study has indicated that students' perceptions about instructional technology impact its utilization (Teo, 2011). Positive attitudes boost learning, competence, and engagement. Negative attitudes and resistance can cause misuse, frustration, and skill loss (Dörnyei & Ushioda, 2013). Many Jadara University translation students are unfamiliar with CAT technologies and may be cautious of their introduction. CAT tool complexity, training and support challenges, and fears that technology may hamper traditional translating abilities may cause this reticence (Lee, 2017). CAT tool integration may fail due to these difficulties, resulting in disengagement and a curriculum-professional preparedness mismatch.

The work on CAT technologies in translation education emphasizes tailoring teaching techniques to students' learning patterns (Kiraly, 2014). Most research focuses on post-implementation evaluation, leaving out how students see these technologies before they immerse in the usage. This difference is critical since Jadara University does not teach CAT tools. Student attitudes before adoption might suggest integrating challenges and possibilities. It allows educators to proactively address acceptance barriers including better training, individualized instruction, and additional support. Without a proactive plan, students may not fully interact with the tools, negating the educational intervention's efficacy and learning results.

Jadara University's move to provide CAT technologies comes as the translation market evolves and demands tech-savvy translators (Pym, Malmkjaer, & Guti árez-Col án Plana, 2013). This transition demands a curriculum that teaches translation theory and practice and technology capabilities. It is tricky to include new technology into the curriculum without sacrificing translation education's main goals. Students may fear that prioritizing technology may overshadow language and cultural analysis abilities in translation (Garc á, 2015). This highlights the need for a complex curriculum that incorporates students' full development as translators and technology users.

Aligning the future implementation of CAT technologies into Jadara University's translation curriculum with students' needs and expectations and reducing barriers to acceptance and use are the two main issues. This study covers 200 Jadara University translation students' CAT technology pros, cons, and support needs. To help instructors and curriculum makers integrate CAT tools, the research investigates these viewpoints before implementation. The success of Jadara University's CAT tools endeavor hinges on overcoming these difficulties and creating a precedent for other schools experiencing similar technology integration challenges in translation instruction.

In conclusion, this work attempts to connect CAT approaches' theoretical merits to academic practice. It helps us incorporate technology into translation education in pedagogically sound, professionally relevant, and learner-responsive ways by focusing on students. This will help Jadara University and others construct a future where CAT technologies are not just part of the curriculum but crucial to a well-rounded translation education.

3. Significance of the Study

CAT technologies are essential for improving translation education to suit market demands. As the translation profession grows more tech-driven, schools must teach students linguistic, cultural, and market-required technological skills. This study bridges the gap between CAT instrument introduction and student acceptance. It investigates Jadara University translation students' thoughts on CAT tool integration to improve instruction and translation education.

A overlooked area in the literature, pre-adoption attitudes are one of this study's key contributions. Many studies evaluate CAT tools after installation, but few examine how students view them before class. This study addresses student expectations, concerns, and needs before CAT tool use to bridge this gap. Writing a curriculum that introduces CAT tools and matches students' talents, learning preferences, and professional aspirations requires understanding pre-adoption attitudes. These insights before deployment help instructors anticipate issues and increase integration probability in the study's proactive curriculum construction.

The findings should influence Jadara University educators and curriculum creators and other institutions exploring similar technology integrations. By addressing perceived usefulness, simplicity of use, and training and support that impact students' opinions of CAT technologies, the study offers practical guidance for creating an educational environment that supports positive technology usage. The principles can help build focused interventions including seminars, hands-on training, and ongoing support to increase students' CAT tool confidence and proficiency. Translation education requires a specialized approach since technology adoption requires technical competence and a thorough understanding of how new tools may enhance conventional translation abilities (Kiraly, 2014).

The study impacts education technology discussions outside schooling. To include digital resources into their courses, schools must investigate human attitudes, reasons, and behaviors (Teo, 2011). This study focuses on students and shows the difficulty of integrating new technologies into current learning environments, adding to technology acceptance in education literature. It provides a model for analyzing and satisfying student needs in curricular innovation in translation education and other tech-integrated fields.

The study also considers translators' future careers. New translators need CAT tool skills (Pym, Malmkjaer, & Guti érez-Col ón Plana, 2013). Teaching students how to utilize CAT technologies makes graduates more employable and aligns academic education with industrial needs. The research stresses educating children for about classroom and career difficulties and opportunities. Education and business must collaborate to educate graduates for jobs and provide meaningful translation.

The study may impact Jadara University and its policies. University technology integration resources for software, training, and support services might depend on student attitudes. This research helps policymakers understand CAT tools' benefit students to promote technical literacy and career preparedness initiatives. The study can demonstrate CAT tool integration's pros and cons to acquire acquiring financial and institutional support for technology-enhanced learning.

Finally, the study contributes to translation education future discussions in a fast-changing technology setting. Teaching must improve using CAT tools. This survey shows student perspectives at a vital time, directing translation curriculum development. Instructors may negotiate curricular innovation and ensure new technology fit students' requirements by understanding how students react to CAT tool inclusion. The project integrates technology and traditional skills to improve learning and prepare students for translation employment, addressing current educational difficulties and shaping the future of translation education.

4. Theoretical Framework

These theories and models study educational technology adoption, particularly CAT tools. To understand students' opinions on CAT tools, examine their readiness to accept new technologies and the pedagogical and psychological implications of technology integrationtechnology integration's pedagogical and psychological implications. This study examines Jadara University's proposed incorporation of CAT technologies into the translation curriculum using TAM, SCT, and DIF.

1. TAM Tech Acceptance Model

Technology adoption Model (TAM) by Davis (1989) is renowned for analyzing technology adoption and applicability. The technology adoption model (TAM) by Davis (1989) is renowned for analyzing the adoption and applicability of technology. TAM says utility and simplicity of use drive tech adoption. In contrast to perceived ease of use, perceived usefulness is the amount to which a technology would increase work performance. Technology use depends on perceptions (Davis, Bagozzi, & Warshaw, 1989). Students favor CAT technologies for translation education based on efficiency, accuracy, and learning results. CAT technology' actual application in professional translation may encourage students to employ them in their assignments. However, perceived simplicity of use alleviates students' concerns about CAT tool complexity and learning and usage. If CAT tools are difficult or time-consuming, students may not use them (Venkatesh & Davis, 2000).

The study utilizes TAM to evaluate how Jadara University translation students see CAT tools' utility and simplicity and how they impact their integration attitudes. The research explores factors that affect these attitudes to assist educators increase CAT tool acceptance and use in translation education.

2. Social Constructionism

Vygotsky's Social Constructivist Theory (1978) encourages learning through cooperation. This theory holds that social interaction and experience sharing, crucial to effective learning, build knowledge. CAT applications often contain teamwork-friendly features like shared translation memory and collaborative terminology management, which can increase translation education collaboration (Kiraly, 2014).

Social constructivists see classroom CAT tool use as collaborative learning that mimics real-world translation. This fosters dynamic, student-centered learning where students take ownership of their education. CAT technologies enable student collaboration, information sharing, and learning, enabling translation's collaborative character (Kiraly, 2000).

Social constructivism promotes learning scaffolding. Teachers scaffold students' understanding of difficult activities. Peer help, guided training, and step-by-step tutorials can scaffold CAT tools. This social constructivist research examines Jadara University's CAT tool integration and how collaboration, support, and active engagement affect students' technology adoption attitudes and preparedness.

3. Diffusion of Innovations Theory

The diffusion of innovations theory by Rogers (2003) describes how new technologies and ideas spread in social systems. New technology adoption requires information, persuasion, choice, execution, and confirmation. Innovation acceptability depends on perceived advantages, compatibility with current ideas and practices, complexity, trialability, and observability (Rogers, 2003).

Academic perception analysis is possible using the Diffusion of Innovations Theory and Jadara University's CAT tool integration. Student acceptance of CAT tools hinges on fit with their abilities and learning habits, perceived relative advantage over traditional methods, and low-risk testing. Students are more likely to utilize CAT technologies that meet their learning goals and increase translation or job market readiness.

It also emphasizes opinion leaders and change agents in adoption. Professors, classmates, and industry professionals might influence students' CAT tool perceptions. Positive reviews and effective use can increase CAT tool adoption by demonstrating their benefits and viability (Rogers, 2003). This study explores Jadara University students' CAT tool readiness and desire and how this effect diffusion.

4. Integration of Theories

This study examines student attitudes about CAT tool integration using TAM, Social Constructivist Theory, and Diffusion of Innovations Theory. TAM reveals cognitive factors—perceived usefulness and ease of use—that increase adoption. Social Constructivist Theory emphasizes cooperative and social learning with CAT tools via interaction and help. The Diffusion of Innovations Theory analyzes compatibility, trainability, and opinion leaders when examining how social systems adopt new technologies.

Our ideas provide a thorough framework for analyzing educational technology adoption issues. They emphasize addressing individual viewpoints and providing a welcoming, collaborative learning environment that promotes students' beliefs and career goals. This theoretical framework guides the study's assessment of Jadara University translation students' views of CAT tools, ensuring successful integration and educational benefits.

5. Literature Review

Technical advances in professional translation have drawn attention to Computer-Assisted Translation (CAT) technologies in translation education. SDL Trados, MemoQ, and OmegaT increase translation efficiency, consistency, correctness with translation memory, terminology management, and quality assurance checks (Bowker & Fisher, 2010). The translation curriculum should incorporate these technologies to educate students for industry standards as they become more prevalent (Pym, Malmkjær, & Guti érrez-Col ón Plana, 2013). This literature study examines the pros, cons, and student viewpoints of translating instruction's CAT tool.

1. Advantages of CAT Tools in Translation Education

CAT tools are recognized for improving translation instruction. Research consistently reveals that CAT tools increase learning by linking academic and professional training. Bowker and Marshman (2010) say CAT tools educate students how to maintain translation memory, use glossaries, and run automated quality checks for real-world translation tasks. These technologies promote students' employability after graduation by improving translation efficiency and familiarizing them with industry norms.

Several studies show that CAT tools make learning more interactive. Kiraly (2014) says CAT technologies' shared translation memory and cloud platforms promote student collaboration and peer learning. Professional translation teams and resource sharing are evident in this collaboration. Further, O'Brien (2012) argues that CAT tools' real-time feedback helps students learn from their mistakes and understand translation procedures.

CAT tools promote students' critical thinking and problem-solving while enhancing translation abilities. Garc á (2015) states that CAT technologies necessitate students to examine texts, manage translation memory, choose terminology, and maintain consistency among publications. Students require this critical thinking to perform complex translation projects at work. CAT technologies provide a full learning platform for technical and cognitive translation instruction, according to research.

2. CAT Tool Integration Issues in Translation Education

CAT tools offer benefits, but using them in translation instruction is problematic. The literature discusses these devices' steep learning curves. Lee (2017) found that students struggle to utilize CAT tools' complex interfaces, which frustrates them and prevents them from adopting the technology. Student learning outcomes may vary due to past technology exposure. Some may be adept with digital tools yet struggle with CAT tool details.

Student and instructor training and support is another key concern. Pym (2013) emphasizes that CAT tool integration requires software and extensive student training. Educational institutions sometimes lack the resources to provide such teaching. Poor training might enable students to use CAT tools superficially, depending on basic functions without fully using the program, according to Sawyer (2014). Underutilization decreases CAT tools' advantages and might tarnish their reputation.

CAT technologies can also overload conventional translators. CAT technologies can improve efficiency and consistency, but Marsh (2018) warns that they might make translation seem mechanical, with students focused on technical procedures rather than cultural and linguistic variations. O'Hagan and Ashworth (2013) agree that translation education must balance technology, language, and culture. Teachers must ensure pupils use CAT technologies to augment their conventional talents, not replace them.

3. Student Opinions on CAT Tools

Understanding student attitudes helps integrate CAT approaches into translation training. Students use and profit from these resources depending on their attitudes. Davis (1989)'s Technology Acceptance Model (TAM) states that students' readiness to accept new technologies depends on their utility and convenience. If they think CAT tools will increase their learning and are simple, students will like them.

Research shows students enjoy CAT tools for their professional value. Mellinger and Hanson (2017) found that students who valued CAT tools in translation were more driven to learn and apply them for assignments. Relevance does not guarantee good attitudes since training quality, software usability, and perceived influence on conventional skills all important.

Complexity and insufficient support make CAT approaches unpopular. Rogers (2003) discovered that sophisticated advances, like CAT technologies in teaching, are less embraced. Lee (2017) found that students who struggled using CAT tool technology saw them as barriers. Thus, user-friendly interfaces, clear instructions, and supportive learning environments can considerably enhance student attitudes toward CAT technology.

Exposure and experience influence CAT tool opinions, according to research. Garc á (2015) found that early resistance to CAT tools lessens as students get more acquainted with their capabilities and see their translation benefits. Positive CAT tool experiences can shift attitudes, so students should practice and acquire confidence.

4. Curriculum Development Implications

The literature suggests many curricular adjustments for CAT tool use in translation education. The first step is extensive and ongoing CAT tool technical and pedagogical training. Teachers should educate software functionalities and integrate them into translating skills (Kiraly, 2014). Training should help students of all technological skills succeed.

Second, curriculum creators should use collaborative social constructivist active and participatory learning. Professional translators must

collaborate, and CAT tools in group projects, peer reviews, and collaborative translation tasks can assist students learn from one other (Kiraly, 2000).

Finally, CAT must not compromise language and cultural abilities. CAT approaches improve translation, not replace human judgment and creativity, teachers should emphasize. This balanced approach prevents technology overuse and develops well-rounded translators with technological and traditional skills (Marsh, 2018).

Translation education gains efficiency, professional relevance, and collaboration with CAT technologies. Integration requires consideration of technological complexity, training demands, and conventional skill implications. Creating curriculum that introduces and encourages CAT tools requires understanding student attitudes. As CAT technologies grow more crucial to translation, students must research them to prepare for their future careers. This literature review underlines the necessity for a holistic strategy to CAT tool integration in translation education that balances technical innovation with the pedagogical objective of producing competent, adaptable, and industry-ready translators.

6. Related Studies

Recent research has evaluated the merits and downsides of CAT technologies in translation teaching. Zheng and Xiang (2022) examined how CAT tools impact Chinese university translation students' performance and attitudes. CAT users increased translation speed and consistency more than conventional users. The study indicated that students first resisted and were apprehensive owing to a lack of preparation, stressing the need for intensive training programs to facilitate adoption. In a Spanish translation program, Jim énez-Crespo and D íaz-Fern ández (2021) studied the effectiveness of mixed learningmixed-learning settings with CAT technology. Their findings showed students appreciated CAT tools' practical qualities for futur efuture careers. The study demonstrated that CAT approaches and critical thinking, critical thinking, and cultural understanding in translation are difficult to match.

In a U.S. translation program, Mellinger and Gasca (2020) found that CAT tools boosted student involvement and learning. The study used questionnaires and classroom observations to assess students' CAT tool opinions. CAT technologies' real-time feedback and cooperation made learning more participative and professional. Students appreciated them. The study found that structured, step-by-step training modules helped shorten the learning curve for CAT instruments' complex capabilities. Lu and Zhang (2019) evaluated Taiwanese translation students' CAT tool impressions, emphasizing early technological exposure. Digitally savvy pupils were more open to CAT tools, whereas those without were concerned about learning new applications.

CAT technology may improve student-centered translation learning, according to O'Brien and Schäer (2020). Their study emphasized aligning CAT tool use with instructional goals including autonomy, problem-solving, and cooperation. CAT technologies can improve learning by encouraging student participation if used appropriately. They stressed curriculum design to ensure that CAT technologies improve translation rather than replace it. Kiraly (2021) observed that CAT tool integration requires technical skills and a shift in teaching approaches to emphasize process-oriented learning and critical translation engagement. BaniYounes et al. (2024) found that Foreign Language (EFL) learners' critical thinking, growth mindfulness, and autonomy are impacted by digital portfolio which serves as a pedagogical tool for enhancing language learning outcomes.

Recent studies show that CAT technologies can improve translation instruction, although adoption and pedagogical alignment are issues. They stress thorough training, clever curriculum design, and a balanced approach that combines CAT methodologies without compromising key skills for effective translators. These findings assist Jadara University prepare to include CAT technology into their translation programs, considering both its pros and cons.

7. Methodology

A mixed-methods study assessed Jadara University translation students' thoughts on CAT tool inclusion in their curriculum. The study examined students' opinions, benefits, issues, and adoption support. The mixed-methods approach included quantitative surveys and qualitative interviews to understand student sentiments.

Participants

We selected 200 Jadara University translation students for the research. Diverse levels of students with diverse technical skills participated in the translation program. The sample includes 18–25-year-old male and female students to represent the university's translation department.

Quantitative Data Collection

All 200 students conducted a structured survey on CAT tool opinions, advantages, and potential issues. The survey asked closed-ended questions on a 5-point Likert scale from "strongly disagree" to "strongly agree." It collected students' opinions on CAT tools' effectiveness and ease of use, their learning goals, and their worries about potential issues. Specific TAM questions examined perceived utility and ease of use as major influences on student perceptions.

Qualitative Data Collection

Semi-structured interviews with 30 survey respondents helped understand students' viewpoints and training and support needs. These interviews provided qualitative data about students' attitudes to support the survey. The interview guide asked students about CAT technologies' benefits, integration issues, and support needs in open-ended questions. With consent, face-to-face interviews were

audio-recorded to validate data analysis.

Data analysis

Descriptive and inferential statistics analyzed survey data. Student CAT tool attitudes mean and standard deviation. Our t-tests and ANOVA examined demographic variations in attitudes, such as age, gender, and technology exposure. This study examined CAT tool perceptions and their influences.

They analyzed qualitative interview data using theme analysis. Reviewing and coding verbatim transcripts found patterns. Thematic analysis revealed similarities in perceived advantages, challenges, and CAT tool integration support mechanisms. Inductively building data themes ensured participant-centered findings.

8. Results

The study examined Jadara University translation students' attitudes on using Computer-Assisted Translation (CAT) technologies in their courses using quantitative surveys and qualitative interviews.

Result of survey

The study found that translation students liked the idea of CAT technology. CAT tools' perceived usefulness averaged 4.2 on a 5-point Likert scale, where 1 was "strongly disagree" and 5 was "strongly agree," suggesting that students thought they would increase translation efficiency and prepare them for professional work. Many students believed that CAT technology would improve their translations' consistency and quality, fulfilling job criteria.

The poll found many students concerned about the CAT tool's complexity. The perceived ease of use averaged 3.5, showing students were optimistic yet expected challenges with the new technology. These concerns were particularly noticeable among students with little to no gadget usage, suggesting familiarity and exposure can change opinions.

Interview observations

According to qualitative interviews, students were receptive to CAT technologies but worried about the learning curve. Many students enjoyed using translation industry tools, understanding that software experience may help their careers. However, other students are concerned that without training and support, the first integration phase would be overwhelming. They are concerned that advanced equipment or poor guidance might slow their courses.

Interviewees also requested a balanced CAT-traditional translation training curriculum. Students appreciated CAT technology' capacity to ease translation but underlined the need of language and cultural skills. Teachers should use CAT technology to improve their skills, according to this response. In conclusion, Jadara University translation students welcome the introduction of CAT methodologies, acknowledging their professional value and potential benefits. However, concerns about tool complexity and the need for substantial training and help temper their enthusiasm. Structured training and a balanced curriculum may help Jadara University use CAT in translation instruction.

Table 1. Student Attitudes Toward CAT Tools

	Question	Average Rating (1-5)	Percentage Positive	
1	Perceived Usefulness	4.2	85	
2	Perceived Ease of Use	3.5	70	
3	Concern about Complexity	3.8	60	
4	Desire for Balanced Approach	4.1	78	

Student Attitudes Towards CAT Tools



Percentage of Positive Responses by Question

Figure 1. This Bar Chart Shows Student Ratings of CAT tools' Utility, Simplicity, Complexity, and Desire for Balance (1-5)

1. Positive Attitudes: Most students valued CAT tool integration, average 4.2 out of 5. This suggests that students think CAT technology will boost translation efficiency and match industrial standards.

2. Despite the benefits, students worried about CAT tool complexity, resulting in a lower average perceived ease of use rating of 3.5. Students are excited to use CAT tools, but they expect to struggle, especially novices.

3. Students, averaging 4.1, wanted a balanced program that used CAT technologies without compromising conventional translating skills. They praised CAT approaches' efficacy and applicability but underlined the need for language and cultural skills.

4. Comprehensive Training and help: In the survey and interviews, students underlined the need for formal training and ongoing help to transition to CAT tools. They stressed that careful supervision and step-by-step teaching were necessary to overcome early fears and integrate into learning.

5. Past technologies Exposure: Students who have used similar technologies were happier to use CAT tools. Experience changes attitudes, thus introduction sessions or preparatory courses may assist.

Inferential Statistics Highlights:

1. Technology Background Changes Attitudes:

For students who had never used CAT tools, a t-test contrasted their attitudes. Results show a significant difference in perceived ease of use among groups (t(198) = 3.56, p < 0.01). The mean evaluation of students with prior experience was 4.0, compared to 3.2 for those without, showing that technology familiarity considerably boosted CAT tool comfort and perceived ease of use.

2. Relationship between gender and attitude

We tested gender's effect on CAT tool attitudes with an ANOVA.

Male and female students had similar perceived utility (F (1, 198) = 1.24, p = 0.27) and simplicity of use (F(1, 198) = 1.56, p = 0.21). This suggests gender did not affect students' views on course CAT tool use.

3. Age-Group Analysis:

To assess attitudes amongst age groups (18-20, 21-23, 24-25), we ran an ANOVAW ran an ANOVA to assess attitudes amongst age groups (18-20, 21-23, 24-25).

Perceived ease of use differed significantly between age groups (F(2, 197) = 4.47, p < 0.05). Post-hoc comparisons using the Tukey HSD test indicated that the youngest group (18-20) reported significantly lower ease of use (Mean = 3.3) than the older groups (Mean = 3.7 for 21-23, Mean = 3.8 for 24-25). Younger students unfamiliar with similar technologies may have found CAT tools tougher.

Implications:

Customized instruction for different levels of technology familiarity can enable all students to use CAT technologies.

• Since younger students (18-20) reported greater CAT tool issues, beginner-friendly instruction or peer mentorship may help.

Male and female pupils respond similarly to CAT technology, allowing for continuous education without gender-specific adjustments.

Table 2. Mean perceived ease of use ratings and sample sizes for groups with and without prior technology exposure, gender, and age.

In	ferential Statistics Re	sults	
	Group	Perceived Ease of Us	Sample Size
1	Prior Exposure	4.0	100
2	No Prior Exposure	3.2	100
3	Male	3.6	110
4	Female	3.5	90
5	Age 18-20	3.3	60
6	Age 21-23	3.7	80
7	Age 24-25	3.8	60



The box plot compares age-group ease of use (18-20, 21-23, 24-25). It shows how perceived ease of use varies with age by showing value distribution and variability within each age group



Figure 2. This bar chart shows category mean perceived ease of use scores. A reference line indicates the mean to compare each group's stated ease of use to the average

What benefits do Jadara University translation students expect from CAT tools?

Based on the study's focus and survey and interview results, Jadara University translation students may benefit from CAT tools:

1. Better Translating

Almost 85% of students believed CAT technology would speed up translation. They hoped translation memory and automatic recommendations would free them from repetitive tasks and allow them to focus on harder translations.

2. Higher Quality and Consistency

78% of students said CAT technology enhanced translation consistency. They realized that terminology management and quality assurance checks in CAT systems might maintain terminology and style uniformity, reducing errors and improving translation quality.

3. Industry Standards Compliance

CAT technologies, widely employed in professional translation, are believed by 82% of students to improve their job chances. They considered CAT tool proficiency was necessary for job competitive translation.

4. Better Learning:

About 75% of students said CAT technologies will improve their learning by providing rapid feedback and hands-on experience like real-world translating work. They loved using academic knowledge in real-world work to understand and recall translation ideas.

5. Supporting Complex Translations

Nearly 70% of students think CAT technology helps with complex translations. Breaking down complex texts, segmentation, and automated translation recommendations can ease translation.

6. Enhancing Collaboration

About 65% of pupils saw CAT technology' collaborative translation potential. In the collaborative translation sector, cloud-based CAT technologies and shared translation memory may promote cooperation and assist them in fulfilling group work.

7. Learning New Skills:

About 80% of pupils felt CAT tools would improve their skills. Beyond translation, many felt mastering specialist software would help them develop their careers and open doors to language and computer jobs.

Table 3. Using Data on Jadara University Translation Students' Perceived CAT Technology Benefits

	Perceived Benefit	Percentage of Stude	
1	Increased Translation Efficiency	85	
2	Improved Consistency and Quality	78	
3	Alignment with Industry Standards	82	
4	Enhanced Learning Experience	75	
5	Support for Complex Translations	70	
6	Facilitation of Collaboration	65	
7	Learning New Skills	80	

Perceived Benefits Of CAT Tools

The table above illustrates how many students feel CAT tools can improve efficiency, standardization, and industry standards.



Figure 3. A horizontal bar chart reveals how many students agree with each claimed benefit, making popularity comparisons straightforward



Distribution of Perceived Benefits of CAT Tools

Figure 4. The pie chart indicates students' perceived benefits and weight.

What challenges do Jadara University translation students expect with CAT tools?

The study's survey and interviews found that Jadara University translation students expect the following CAT tool use issues:

1. Complexity, high learning curve:

The apparent difficulty of CAT instruments worries 68% of students. Students may find the program interfaces and learning curve difficult if unfamiliar with such technologies. In managing translation memory, terminology databases, and advanced features in CAT tools, 68% of students worry about the apparent difficulty of CAT instruments. Students may find the program interfaces and learning curve difficult if unfamiliar with such technologies. Managing translation memory, terminology databases, and advanced features in CAT tools is also worrying.

2. Lack of Training and Support:

Around 72% of students doubted CAT tool training and support. They worry that without precise, step-by-step training and ongoing support, they won't be able to utilize the tools effectively, which might irritate and demotivate them. Students underlined the need for practical workshops, clear tutorials, and accessible help to.

3. Technology Overuse:

About 60% of students worry that CAT tools abuse technology and hamper traditional translation. They fear that automation and suggestions will hamper critical thinking and translation choices. This topic shows a desire to preserve language and culture while employing technology.

4. Learning style compatibility:

Students worried about CAT technology's compatibility with their learning styles (55%). Some students prefer hand translation and worry about computerized equipment malfunctioning. There are concerns that CAT technologies may make learning mechanical or impersonal.

5. Tech Issues and Software Reliability:

Nearly 50% of students worry about software bugs, crashes, and device incompatibilities. They fear technical glitches will hinder their studies and stress them out, especially during key translation jobs or examinations.

6. Time Management Issues:

About 58% of students worried that learning CAT technology would take too long, hurting their focus on other topics. Maintaining CAT tool competency with other academic commitments worries them.

7. Cost and Access:

About 47% of students are worried about the cost and accessibility of CAT technology. A program's pricey license or lack of computer resources may restrict equal access and participation in CAT tool-based learning activities.

Table 4. Concerns and Challenges of CAT Tools

Concerns And Challenges Of CAT Tools

	Concern/Challenge	Percentage of Stude
1	Complexity and Steep Learning Curve	68
2	Insufficient Training and Support	72
3	Over-Reliance on Technology	60
4	Compatibility with Learning Styles	55
5	Technical Issues and Software Reliability	50
6	Time Management Concerns	58
7	Cost and Accessibility	47

Distribution of Concerns and Challenges of CAT Tools



Insufficient Training and Support



Figure 5. Shows Percentages of Concerns and Challenges of CAT Tools

How does students' technological experience and CAT tool usability impact integration attitudes?

The study revealed that past technological experience and CAT tool perceived efficacy influenced students' integration attitudes.

Technological Experience:

1. Usability correlation: positive

Students who have used CAT tools or similar software are more likely to support integration. These students scored higher on perceived ease of use (Mean = 4.0) than those without prior exposure (Mean = 3.2), showing that technology familiarity reduces anxiety and enhances trust in CAT tools.

2. Adoption Will Increase:

Experts used CAT tools more in their lectures. Technology assisted their integrative attitude. Early positive technology encounters drove CAT tool optimism.

3. Less Learning curve worry:

Technically proficient students worried less about CAT technology learning and complexity. They were more likely than new students to think practice and training might fix early issues.

Impact of Usability:

1. Positive Attitude Driver:

Perceived usefulness substantially influenced satisfaction with the CAT tool integration. Students who thought CAT technologies will enhance translation efficiency and fulfill industry standards (4.2 out of 5) were more interested in utilizing them. They valued the instruments for job advancement.

2. Learning Motivation:

Students who saw CAT tools as useful were more encouraged to use them. This motivated them to attend training programs and workshops and investigate CAT tool capabilities independently further.

3. Less Change Resistance:

High perceived utility reduced change resistance. Students who saw the benefits of CAT tools were more open to innovative education technologies and less likely to employ traditional translation methods. The change offered learning opportunities.

Combined Effect:

Synergistic Attitude Effect:

CAT tool integration attitudes increased greatly for students with technology experience and a strong sense of usefulness. High engagement, little resistance, and proactive integration responses characterized this group.

Intervention Focuses:

Introductory workshops, practical demonstrations, and professional testimony can help students unfamiliar with CAT technology alter their minds. Tailoring assistance reduces the gap and boosts CAT tool adoption.

Results show that prior technology exposure and perceived utility affect students' perspectives on CAT tool integration. Technology familiarity and a clear description of CAT tools' practical benefits might increase students' receptivity and readiness to utilize them in translation courses.

Past exposure and perceived usefulness influence opinions.

Based on data on prior technology exposure and perceived usefulness on students' CAT tool integration opinions, I created the following graphics:

Table 5. Past technology exposure and perceived CAT tool efficacy impact the percentage of students who like their use.

influence of Prior Exposure and Perceived Osefulness on Attitude	nfluence	Of	Prior	Exposure	And	Perceived	Usefulness	On	Attitudes
--	----------	----	-------	----------	-----	-----------	------------	----	-----------

	Factor	Positive Attitude Per
1	Prior Exposure to Technology	80
2	No Prior Exposure to Technology	55
3	High Perceived Usefulness	85
4	Low Perceived Usefulness	50
5	Both Exposure and Usefulness	90
6	Neither Exposure nor Usefulness	40

The next bar chart shows students' positive sentiments across factors. The combination of prior exposure and perceived utility improves attitudes toward CAT tools.



Figure 6. The pie chart distributes positive attitudes per category to highlight how each element impacts students' CAT tool integration receptivity

These graphics demonstrate how technical familiarity and CAT tool perceived value influence translation students' positive evaluations

What training and support do Jadara University translation students need to use CAT technologies?

The study and interviews found that Jadara University translation students require the following training and support to use CAT technologies:

1. Complete Intro Workshops:

Approximately 80% of students stressed the need for CAT tool basics training. These lessons should include software tutorials, translation memory, terminology management explanations, and confidence-building exercises. Students suggested hands-on workshops to practice using the tools before using them in the classroom.

2. Ongoing technical support and helpdesks:

About 75% of students value technical support and helpdesks. They believed troubleshooting, FAQs, and CAT-savvy helpdesk workers would calm them and help them solve problems quickly. Maintaining confidence and momentum in CAT tool learning required ongoing guidance.

3. Complete User Guides and Online Tutorials:

About 70% of students want self-paced online sessions with clear directions. Video tutorials, step-by-step instructions, and FAQs outside of class were popular. Self-paced learning was great for diverse learning rates and help outside of classes.

4. Collaborative Learning and Support:

Students recommend peer support and collaborative learning in training at 65%. They love peer learning and encourage group projects, peer mentorship, and CAT-enabled collaboration. These strategies aim to improve abilities and create a supportive learning environment where students can share information and solve problems.

5. Adding CAT Tools to Coursework:

Students agree that gradually introducing CAT technology into coursework may increase proficiency (68%). They advised using CAT technology in translation tasks throughout their investigation. This method would enable students to practice what they learn in real life, improving their skills.

6. CAT Tool Use Review:

About 60% of students value CAT tool feedback and evaluation. They requested constructive critique and suggestions for improvement to identify future practices. Students thought such feedback would motivate them to utilize the tools.

7. Industry perspectives and guest lectures:

55% of students said CAT-using industry professionals' guest lectures would be useful. Professionals' practical guidance and emphasis on CAT tools in professional translation may bridge the gap between academic training and market requirements.

Jadara University translation students feel CAT technology integration requires a comprehensive, diversified approach to training and help. Hands-on training, constant support, peer cooperation, and real-world insights can help the university educate students to apply CAT technology in translation studies and jobs.

Table 6. Training and Support Needed for CAT Tools Integration

Training And Support Needed For CAT Tools Integration

	Training/Support Typ	Percentage of Stude
1	Comprehensive Introductory Workshops	80
2	Ongoing Technical Support and Helpdesks	75
3	Detailed User Manuals and Online Tutorials	70
4	Peer Support and Collaborative Learning	65
5	Integration into Regular Coursework	68
6	Feedback and Assessment on Usage	60
7	Guest Lectures and Industry Insights	55



Distribution of Training and Support Needs for CAT Tools





Jadara University translation students: Will CAT technology boost their traditional translation skills?

According to the survey and interviews, Jadara University translation students think CAT technology may affect their traditional translation skills:

Positive effects:

1. Higher Efficiency and Complexity:

65% of students believe CAT technology can increase their efficiency by minimizing repetitive tasks and letting them focus on difficult translation challenges. They believe CAT technology can automate routine chores to free up cognitive resources for cultural backgrounds and idioms.

2. More Consistent Terminology:

For terminology management across large projects, 60% of students feel that CAT technology helps preserve translation consistency. They increase translation accuracy and consistency by storing and reusing words and phrases.

3. Supporting Traditional Learning:

About 55% of students view CAT technology as an addition to traditional translation methods. They believe these technologies can offer trainees real-world experience while improving their translation skills. Their translation skills develop through this connection.

Negative effects

Risk of Technology Overdependence:

62% of students believe that over-reliance on CAT technology may hamper manual translating abilities. They worry that automated recommendations and translation memory would restrict their critical thinking and decision-making, which are necessities of conventional translation.

2. Lower Source Text Engagement:

About 58% of students worry that overusing CAT technology may limit their engagement with source literature. They worry that automated procedures will prevent them from analyzing the source material, resulting in superficial translations without context.

3. Language proficiency declines:

About 54% of pupils worry that CAT use will impair their language skills. They worry that computer recommendations will reduce their need to recall vocabulary and grammatical rules, weakening their source and target language abilities.

4. Personalizing Translation Style Issues:

About 50% of students think CAT technology standardizes translations but impedes their flair. Translation memory and traditional outputs may limit their creativity and ability to adapt to certain circumstances and audiences.

Table 7. Perceived Impact of CAT Tools on Traditional Translation Skills

Perceived Impact Of CAT Tools On Traditional Translation Skills

	Perceived Impact	Percentage of Stude
1	Enhanced Efficiency and Focus on Complex Aspects	65
2	Improved Consistency and Terminology Management	60
3	Supplement to Traditional Learning	55
4	Risk of Over-Reliance on Technology	62
5	Reduced Engagement with Source Texts	58
6	Potential Erosion of Language Proficiency	54
7	Challenges in Developing Personalized Translation Style	50

Distribution of Perceived Impacts of CAT Tools on Traditional Skills





Figure 8. Estimated CAT Tool Impact on Traditional Skills

Results Summary:

1. CAT Tool Integration Opinions:

Most students saw CAT tool integration as a way to boost translation output and meet industry standards. Despite this positive outlook, students, especially those inexperienced with similar technology, worried about the complexity and learning curve of CAT tools.

2. Possible CAT Tool Benefits:

Student feedback on CAT technology highlighted enhanced translation efficiency (85%), consistency and quality (78%), and adherence to industry standards (82%). They appreciated how CAT tools provided hands-on learning opportunities. Feedback on CAT technology included enhanced translation efficiency (85%), consistency and quality (78%), and industry-standard industry-standard alignment (82%). They loved how CAT tools offered hands-on learning.

Visual representation: Bar and pie charts favored efficiency and professional relevance.

3. CAT Tool Issues:

Key Challenges: Students worried about the steep learning curve (68%), insufficient training and help (72%), and technology overuse (60%). Accessibility, learning style compatibility, and technology were further challenges.

Visualization: Bar and pie charts revealed the prevalence of issues, stressing the need for comprehensive support and training.

4. Past exposure and estimated value:

Research shows that CAT tools are better accepted by students who have used them before and value them. This group was more motivated and less resistant, proving that familiarity and communication benefits boost adoption.

Visualization: Bar and pie charts showed how prior exposure and perceived utility affect student perceptions.

5. Needs Support and Training:

Students preferred intensive introductory workshops (80%), ongoing technical help (75%), and user manuals and online tutorials (70%) for integration. Peer assistance, curricular integration, and tool usage feedback were also helpful.

Visual Representation: Assistance-type charts showed the need for thorough training to suit student needs.

6. Impact on traditional translation:

Mixed Perceptions: Students have differing views on the impact of CAT methods on traditional translation. While they acknowledge increased efficiency (65%) and consistency (60%), they express concerns about over-reliance on technology (62%) and diminished engagement with source materials (58%).

Bar and pie charts showed a balance between pros and cons.

9. Implications

The findings affect Jadara University's CAT-based translation curriculum:

Curriculum Development Implications

1. Thorough training:

According to the survey, many students worry about CAT technology's complexity and high learning curve. To address this, the school should offer step-by-step lectures, practical exercises, and hands-on tutorials. Customizing CAT tool training to student technology

skills should help all students acquire confidence.

2. Include continuous support:

Help desks, user manuals, FAQs, and video tutorials should address student technical support needs. Students will resolve issues, lessen frustration, and stay engaged with CAT tools with ongoing assistance. Establish peer mentorship programs where experienced students teach newer students the techniques.

3. Integrating Traditional Skills:

Teachers should balance CAT technologies in the curriculum to minimize the overuse of technology and loss of traditional translating skills. Tools like CAT should support translators, not replace them. Student assignments should require manual and technology-assisted translation to develop a balanced skill set.

4. Interventions for Novice Students:

The study found that students with technological experience are more enthusiastic about CAT tool inclusion. Beginning lessons may assist students with limited digital literacy or technology knowledge, evening the playing field so that all students may use CAT tools.

Teaching Practice Implications

1. Highlight CAT Tools' utility:

Teachers might stress CAT technology's practical benefits and real-world applications to boost student perspective. Case studies, guest lectures from industry executives, and professional applications help students understand CAT tools' relevance and applicability in their future professions.

2. Encourage Critical Thinking:

Teachers could integrate critical engagement and reflection tasks to address concerns about automation and decreased source text engagement. Teachers may have students examine the benefits and downsides of manual and CAT-assisted translations. Students learn when and how to employ CAT tools critically.

3. Learning from Feedback:

Feedback and evaluation on CAT tool use may help students improve their use of the tools. Students should receive constructive feedback on translation accuracy and CAT tool technique to improve their approach and maximize their benefits.

Policy/Institutional Support Implications

1. Technology Integration Resource Allocation:

Based on the findings, the institution should provide software licenses, training, and support infrastructure to incorporate CAT technology. Students need money and institutional help to integrate well.

2. Evaluate Integration Results:

Monitor and measure CAT tool integration's impact on student learning and skill development. Students, educators, and industry stakeholders can provide frequent integration effectiveness and development feedback. This iterative approach updates the curriculum to student and industry needs.

3. Equalizing Technology Access:

Cost and accessibility issues need guidelines that give all students equitable access to CAT tools and resources. It may provide computer labs, discounted software, or equipment loans.

Impact on Future Research

1. Studies of Long-Term Skill Development

Research might assess the long-term effects of CAT tool integration on traditional translation. Longitudinal studies may show how technology use and conventional skills evolve over time and offer best practices for combining CAT technologies to enhance all abilities.

2. Institutional Comparisons:

Comparative research across universities may reveal CAT tool integration trends and challenges trends and challenges in CAT tool integration in translation education. Understanding how student demographics and institutional support affect results should inform CAT tool inclusion.

These implications provide a foundation for using CAT approaches in translation education at Jadara University to promote learning, manage student concerns, and prepare students for professional success.

10. Conclusion

Translation students at Jadara University support the intended use of Computer-Assisted Translation (CAT) technology, although there are challenges. Students realize that CAT tools may improve efficiency, consistency, and industry standards, improving their learning and preparing them for careers. However, CAT tool complexity, technical abuse, and potential consequences on traditional translating require

a balanced and well-supported integration plan.

All students, regardless of technology background, need substantial training and continuing support to utilize CAT tools. A balanced strategy that incorporates CAT technologies as supplemental aids is vital for student skill development. Targeted interventions, specialized assistance, and continuing assessment can help Jadara University integrate CAT techniques into its translation program, boosting teaching and satisfying market expectations.

11. Recommendations

1. Offer Complete Training:

Provide CAT tool fundamentals and practical training in introductory workshops. Students of all technical levels should be able to utilize these apps. Training should continue with advanced sessions as students acquire skills.

2. Offer continuing technical support:

To provide students with technological support, create helpdesks, online resources, and peer support networks. It would eliminate technical fears and help students solve problems faster, keeping their faith and involvement in CAT technology.

3. Gradually Add CAT Tools to Coursework:

Gradually integrate CAT technology into translation assignments and projects to let students use their skills. Students will master this approach and learn how CAT technologies enhance translation.

4. Balance Technology and Traditional Skills:

CAT should augment translation methods, not replace them. Give students manual and technology-assisted translation activities to develop critical thinking, creativity, and language abilities.

5. CAT Tool Feedback and Evaluation:

In courses, evaluate students' use of CAT tools. Students should receive critical feedback on technical proficiency and strategic CAT tool usage to enhance their approach and maximize their benefits.

6. Disclose CAT Tools' Practical Benefits:

Show real-world CAT tool usage via guest lectures, case studies, and industry insights. This will make students appreciate and apply CAT technologies in professional translation.

7. Evaluate Integration:

Regularly evaluate CAT tool integration with student, instructor, and industry input. Use this feedback to adapt the curriculum to student and industry needs.

8. Equalize Tech Access:

Make sure all students have fair access to CAT tools and resources. Consider computer labs, cheap software licensing, or equipment lending.

These ideas will assist Jadara University in fostering CAT tool integration into its translation program, boosting learning and preparing students for modern translation success.

Acknowledgments

We greatly appreciate the valuable contributions of our students at Jadara University, who helped complete this work.

Authors' contributions

Dr. Luqman M Rababah initially drafted the manuscript, which Dr. Talafha redrafted in its final version. Dr. Duaa K Talafha was responsible for data collection, drafting the discussion, and designing and proofreading the manuscript.

Funding

This work was supported financially by the Deanship of Scientific Research at Jadara University.

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Sciedu Press.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer-reviewed.

Data availability statement

The data supporting this study's findings are available on request from the corresponding author. However, due to privacy or ethical restrictions, the data are not publicly available.

Data sharing statement

No additional data are available.

Open access

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

References

- Al Huneety, A., Alshdaifat, A., Al-Faqeeh, E., Al Mashaqba, B., & Rababah, L. (2024). Refusal strategies by young Jordanian speakers in Arabic and English. *Theory and Practice in Language Studies*, *14*(6), 1916-1926. https://doi.org/10.17507/tpls.1406.33
- Al-Khasawneh, F., Huwari, I., Alqaryouti, M., Alruzzi, K., & Rababah, L. (2024). Factors affecting learner autonomy in the context of English language learning. Jurnal Cakrawala Pendidikan, 43(1), 140-153. https://doi.org/10.21831/cp.v43i1.61587
- Al-Mazari, W. Y., & Rababah, L. M. (2024). Flouting Grice's Maxims in a Jordanian TV talk show. *Jordan Journal of Modern Languages & Literatures, 16*(2), 443-460. https://doi.org/10.47012/jjmll.16.2.9
- Alshehab, M., & Rababah, L. (2020). Lexical legal problems committed by translation students when translating English legal sentences into Arabic at Jadara University in Jordan. *Asian EFL Journal Research Articles*, 27(2), 193-215.
- BaniYounes, Z. B. M., Esanmurodova, N., Menon, S. V., & Sivaprasad, G. V. (2024). The Students are Also Invited: Portfolio Assessment and its Impact on EFL Learners' Critical Thinking, Growth Mindfulness, and Autonomy. *Computer-Assisted Language Learning Electronic Journal*, 25(4), 604-628.
- Bowker, L., & Fisher, D. (2010). Computer-aided Translation. In Y. Gambier & L. van Doorslaer (Eds.), *Handbook of translation studies* (Vol. 1, pp. 60-65). John Benjamins. https://doi.org/10.1075/hts.1.comp2
- Bowker, L., & Marshman, E. (2010). Translation technology and its applications in the professional translation industry.
- Dakamsih, N. J., & Rababah, L. M. (2024). Breaking Barriers, Elevating Performance: Microsoft Teams and the Writing Proficiency of EFL Jordanian Students Barriers, Elevating Performance: Microsoft Teams and the Writing Proficiency of EFL Jordanian Students. *World Journal of English Language*, 14(5), 493-500. https://doi.org/10.5430/wjel.v14n5p493
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, *13*(3), 319-340. https://doi.org/10.2307/249008
- Davis, F., Bagozzi, R., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982-1003. https://doi.org/10.1287/mnsc.35.8.982
- Dörnyei, Z., & Ushioda, E. (2013). Teaching and Researching Motivation (2nd ed.). Routledge. https://doi.org/10.4324/9781315833750
- Garc á, I. (2015). Translation Technologies: Scope, tools, and applications. *The Interpreter and Translator Trainer*, 9(1), 109-127. https://doi.org/10.1080/1750399X.2015.1019254
- Jim énez-Crespo, M. A., & D íz-Fern ández, C. (2021). The role of technology in translator education: Emerging trends and future challenges. *Translation Studies Quarterly*, 15(2), 209-228.
- Kiraly, D. (2000). A social constructivist approach to translator education: Empowerment from theory to practice. Routledge.
- Kiraly, D. (2014). Social constructivist translator education: Strengthening collaboration and autonomy in the classroom. Routledge. https://doi.org/10.4324/9781315760186
- Mellinger, C. D., & Gasca, R. L. (2020). Enhancing translator training with CAT tools: Student perspectives and learning outcomes. *Translation and Interpreting Studies*, 15(1), 45-62.
- Mellinger, C. D., & Hanson, T. A. (2017). *Quantitative research methods in translation and interpreting studies. Routledge.* https://doi.org/10.4324/9781315647845
- Pym, A. (2013). Translation technology and education: Developing hybrid approaches. Translation Journal, 17(4), 87-104.
- Pym, A., Malmkjaer, K., & Guti érrez-Col ón Plana, M. (2013). *Translation and language learning: The role of translation in the teaching of languages in the European Union*. European Commission.

- Rababah, L. (2024). Language Processing Abilities in a Multilingual Context: The role of Linguistic Background among students in Amman, Jordan. *Psycholinguistics*, 35(2), 157-179. https://doi.org/10.31470/2309-1797-2024-35-2-157-179
- Rababah, L. M. (2023). Stepping into language mastery: Virtual reality simulations as catalysts for EFL pronunciation enhancement. *Journal of Applied Learning and Teaching*, 6(1 Special issue), 110-122. https://doi.org/10.37074/jalt.2023.6.S1.10
- Rababah, L. M., & Talafha, D. K. (2024). Unlocking writing potential: Assessing the impact of Grammarly on Jordanian EFL students' writing proficiency. *Theory and Practice in Language Studies*, 14(5), 1486-1492. (Rababah & Talafha, 2024) https://doi.org/10.17507/tpls.1405.21
- Rababah, L. M., Rababah, M. A., & Al-Khawaldeh, N. N. (2024). Graduate students' ChatGPT experience and perspectives during thesis writing. *International Journal of Engineering Pedagogy*, 14(3), 22-35. https://doi.org/10.3991/ijep.v14i3.48395
- Rababah, M. A., Rababah, L. M., Abumelhim, M. H., Abu-Melhim, A.-R., & Rababah, K. A. (2023). Interdisciplinary investigation of naming practices of cafes cafe signages in Jordan. *GEMA Online Journal of Language Studies*, 23(4), 1-14. https://doi.org/10.17576/gema-2023-2304-01
- Rogers, E. M. (2003). Diffusion of innovations (5th ed.). In an integrated approach to communication theory and research, pp. 432-448.
- Sawyer, D. (2014). The future of translation training: Integrating technology with pedagogy. John Benjamins.
- Teo, T. (2011). Technology Acceptance Research in Education: A systematic review. *Educational Research Review*, 6(1), 42-49. https://doi.org/10.1016/j.edurev.2010.07.003
- Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186-204. https://doi.org/10.1287/mnsc.46.2.186.11926
- Zheng, Y., & Xiang, W. (2022). Emerging Technologies in Translation Education: A Review and Future Directions. *Journal of Translation Technology*, *14*(3), 191-210.